

Steven L. Beshear

#### **ENVIRONMENTAL AND PUBLIC PROTECTION CABINET**

Robert D. Vance Secretary

Governor

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

February 27, 2008

Randy L. Tackett Sidney Coal Company, Inc. PO Box 299 Sidney, KY 41564

> Re: KPDES Application Complete KPDES No.: KY0107140 Sidney Coal Company Inc. - Bevins Branch Surface Mine AI ID: 85262 Activity ID: APE20070001 Pike County, Kentucky

Dear Mr. Tackett,

Your revised Kentucky Pollutant Discharge Elimination System (KPDES) permit application for the above-referenced facility was received by the Division of Water on February 26, 2008. A completeness review of your permit application has been conducted. Please be aware that you may be asked to provide additional information to clarify, modify, or supplement your application material. In accordance with 401 KAR 5:075, Section 1(7) you are being provided written notification that your application has been deemed complete as of the date of this letter.

If you have any questions concerning this matter, please call me at (502) 564-8158, extension 652.

Sincerely,

Allen Ingram II

Environmental Engineer Assistant I KPDES Branch

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Division of Water

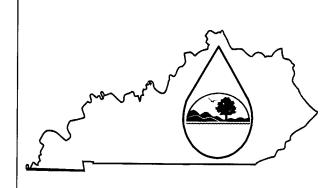
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**Enclosures** 

: Division of Water Files



# **KPDES FORM C**



## KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

## PERMIT APPLICATION

A complete application consists of this form and Form 1. For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Bevins Branch Surface Mine	County: Pike							-
I. OUTFALL LOCATION	AGENCY USE	0	1	0	7	1	4	0

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No.		LATITUDE			LONGITUDI	3	
(list)	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	RECEIVING WATER (name)
D1	37	40	05	82	22	32	Big Creek
D2	37	40	02	82	22	34	Big Creek
D3	37	39	55	82	22	31	Big Creek
D4	37	39	53	82	22	24	Bevins Branch
D5	37	39	53	82	22	16	Bevins Branch
D5A	37	39	52	82	22	04	Bevins Branch
D5B	37	39	41	82	22	04	Bevins Branch
D6	37	39	46	82	22	12	Bevins Branch
D7	37	39	46	82	22	20	Bevins Branch
D8	37	39	46	82	22	20	Bevins Branch
Pond 1A	37	39	47	82	22	07	Bevins Branch

#### II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO.	OPERATION(S) CONTR	LIBUTING FLOW	TREATMENT	
(list)	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
D1	Surface runoff	27.01 of (month)	Sedimentation	1-U
DI	Surface runoii	27.91 cfs (peak)	Discharge to surface water	4-A
D2	Surface runoff	12 22 ofc (pools)	Sedimentation	1-U
<i>D2</i>		13.32 cfs (peak)	Discharge to surface water	4-A
D3	Surface runoff	7.45 cfs (peak)	Sedimentation	1-U
	Surface Fundii	7.43 cis (peak)	Discharge to surface water	4-A
D4	Surface runoff	18.11 cfs (peak)	Sedimentation	1-U
	Surface Tunon	16.11 cis (peak)	Discharge to surface water	4-A
D5	Surface runoff	33.60 cfs (peak)	Sedimentation	1-U
23	Surface runon	55.00 cis (peak)	Discharge to surface water	4-A
D5A	Surface runoff	75.92 cfs (peak)	Sedimentation	1-U
2011	Surface Fullon	75.92 cis (peak)	Discharge to surface water	4-A
D5B	Surface runoff	50.06 cfs (peak)	Sedimentation	1-U
202	Surface Tunon	50.00 cis (peak)	Discharge to surface water	4-A
D6	Surface runoff	14.84 cfs (peak)	Sedimentation	1-U
20	Surface runon	14.04 cis (peak)	Discharge to surface water	4-A
<b>D</b> 7	Surface runoff	13.90 cfs (peak)	Sedimentation	1-U
		13.30 cis (peak)	Discharge to surface water	4-A
D8	Surface runoff	7.01 cfs (peak)	Sedimentation	1-U
20	Sui face FullOff	/.ul cis (peak)	Discharge to surface water	4-A
Pond 1A	Surface runoff	411.09 cfs (peak)	Sedimentation	1-U
I OHG III		411.09 cis (peak)	Discharge to surface water	4-A

## II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. E:	xcept for sto	rm water runoff, leaks, or spills, are any of	he discharges des	cribed in Items II-A or B intermittent or seasonal?
		Yes (Complete the following table.)	$\boxtimes$	No (Go to Section III.)

OUTFALL	OPERATIONS	FREQU	ENCY			FLOW		
NUMBER	CONTRIBUTING FLOW	Days Per Week	Months Per Year		Rate ngd)		volume vith units)	Duration (in days)
(list)	(list)	(specify average)	(specify average)	Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III. MAXIMUM PI	RODUCTION				
A. Does an effluent	guideline limitat	tion promulga	ated by EPA unde	r Section 304 of the Clean Water	Act apply to your facility?
☐ Yes	s (Complete Item	n III-B) List e	effluent guideline	category:	
⊠ No	(Go to Section I	IV)			
B. Are the limitation	ns in the applical	ble effluent g	uideline expressed	d in terms of production (or other	measures of operation)?
Yes	s (Complete Item	n III-C)	No (C	Go to Section IV)	
C. If you answered production, expr	"Yes" to Item essed in the term	III-B, list the sand units u	he quantity which sed in the applical	represents the actual measuren ble effluent guideline, and indicate	nent of your maximum level of e the affected outfalls.
	N	MAXIMUM	QUANTITY		Affected Outfalls
Quantity Per Day	Units of M			n, Product, Material, Etc. (specify)	(list outfall numbers)
				:	
	J				
IV. IMPROVEMI	ENTS				n schedule for the construction,
orders, enforcen	s (Complete the	schedule lette	ers, stipulations, c	not limited to, permit condition ourt orders and grant or loan cond No (Go to Item IV-B)	s, administrative or enforcement litions.
IDENTIFICATION OF AGREEMENT,			ED OUTFALLS Source of Discharge	BRIEF DESCRIPTION OF PROJ	JECT FINAL COMPLIANCE DAT Required Projected
B. OPTIONAL: `	You may attach a	additional she	eets describing an	v additional water pollution contro	ol programs (or other
environmental p	rojects which ma	ay affect you	r discharges) you	now have under way or which you or planned schedules for construct	ı plan. İndicate whether each
V. INTAKE AND	EFFLUENT C	CHARACTE	RISTICS		
span NO  D. Use the space be	ace provided. OTE: Tables V-A elow to list any c	A, V-B, and 'of the pollutar	V-C are included on	on separate sheets numbered 5-18.  Title III, Section 313) listed in T	Table C-3 of the instructions,
which you know briefly describe	or have reason the reasons you	to believe is believe it to l	discharged or may be present and rep	be discharged from any outfall. I ort any analytical data in your pos	For every pollutant you list, seession.
POLLUTA	NT	SOU	JRCE	POLLUTANT	SOURCE
NONE					

VI	POTENT	TIAL DISCHARGES NOT COVERE	ED BY ANA	LYSIS	
	Is any pollu		a componen	t of a substar	nce which you use or produce, or expect to use or ct?
		Yes (List all such pollutants below)		$\boxtimes$	No (Go to Item VI-B)
:					
В.	Are your of discharge o	perations such that your raw materials, of pollutants may during the next 5 year	processes, or rs exceed tw	r products ca o times the m	n reasonably be expected to vary so that your naximum values reported in Item V?
		Yes (Complete Item VI-C)	⊠ No	(Go to Item \	VII)
C.	expected le	vered "Yes" to Item VI-B, explain belo vels of such pollutants which you antic sheets if you need more space.	w and descri cipate will be	be in detail to discharged t	o the best of your ability at this time the sources and from each outfall over the next 5 years. Continue on

4

VII. BIO	OGICAL TOXICITY TESTING DATA			
Do you have	any knowledge of or reason to believe that any biological test for act on a receiving water in relation to your discharge within the last 3 years.	ute or chronic t	toxicity has been made on any of y	our
	Yes (Identify the test(s) and describe their purposes below)	$\boxtimes$	No (Go to Section VIII)	
VIII. CON	TRACT ANALYSIS INFORMATION			
	the analyses reported in Item V performed by a contract laboratory or	consulting firr	m?	
×	Yes (list the name, address, and telephone number of, and polluta analyzed by each such laboratory or firm below)	ants	☐ No (Go to Section IX)	

UTANTS ZED (list)
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5 Revised June 1999

IV .	CFD	TIEL	CA	TION
14.	C IVIN		. A	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
SIGNATURE	DATE

these pages. (See instructions) PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing

V. INTAKE AND	V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)	ACTERIST	TCS (Continued fro	m page 3 of Fo	rm C)					OUTFALL NO.		
Part A – You must J	Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.	at least one	analysis for every pol	lutant in this tal	ole. Complete one tab	le for each outfa	II. See instructions	for additional detail	s.			
				2. EFFLUENT				3. UNITS (specify if blank)	rs olank)	4.	4. INTAKE (optional)	
1. POLLUTANT	a. Maximum Daily Value	ily Value	b. Maximum 30-Day Value (if available)	-Day Value ble)	c. Long-Term Avg. Value (if available)	Avg. Value ible)	d. No. of	a. Concentration	b. Mass	a. Long-Term Avg. Value	vg. Value	b.
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1) Concentration	(2) Mass	No of Analyses
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)	22						1	mg/l				
e. Ammonia (as N)												
f. Flow (in units of MGD)	VALUE No Flow	V (2)	VALUE	Œ	VALUE	JΕ	1	MGD		VALUE	त्रो	
g. Temperature (winter)	VALUE	(2)	AALUE	Œ	VALUE	JE		°c		VALUE	H	
h. Temperature (summer)	VALUE	(	VALUE	Æ	VALUE	JE		°c	:	VALUE	Ē	
i. pH	MINIMUM N	MAXIMUM 7.02	MINIMUM	MAXIMUM				STANDARD UNITS	STINU			

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT	2. MARK "X"	K "X"		1	EE	3. EFFLUENT				4. UNITS		INTAK	6. INTAKE (optional)	d)
AND CAS NO.	a.	b.	a. Maximum Daily Value	ily Value	b. Maximum 30-Day Value (if available)	0-Day able)	c. Long-Term Avg. Value (if available)	n Avg. ilable)	d.	Þ	Þ.	a. Long-Term Avg Value	Avg	b. No. of
(if available)	Believed Present	Believed Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses	Concentration	Mass	(1) Concentration	(2) Mass	Analyses
a. Bromide (24959-67-9)		X												
b. Bromine														
Residual		X												
c. Chloride		×												
d. Chlorine,														
Residual		×												
e. Color		×												
f. Fecal Coliform		X												
g. Fluoride (16984-48-8)		×												
h. Hardness (as CaCO <sub>1</sub> )	×		414.77						_	mg/l				
i. Nitrate – Nitrite (as N)		×					·							
j. Nitrogen, Total														
Organic (as N)		×												
k. Oil and Grease		×												
l. Phosphorous (as P), Total 7723-14-0		X												
m. Radioactivity														:
(1) Alpha, Total		Х												
(2) Beta, Total		Х												
(3) Radium Total		X												
(4) Radium, 226, Total		×												

MARK ***   Befreign   September   Septem	1.	2.					اس				4.			'n.	
Balieved   Believed   Believed   Believed   Believed   About   Concentration   Mass   Concentration   Concentration   Mass   Concentration   Concentration   Mass   Concentration   Mass   Concentration   Concentration   Mass   Concentration   Concentration   Concentration   Concentration   Concentration   Concentration	POLLUTANT	MARI	K "X"			EFI	LUENT				CITINO		INIAN	T (option:	
Pacific of Absent   Concentration   Mass   Concentration   Mass   Concentration   Mass   Concentration   Mass   Concentration   Concentratio	And CAS NO.	۵	ਤ	a. Maximum Daily	Value	b. Maximum 3 Value (if avail	0-Day able)	c. Long-Tern Value (if ava	ı Avg. lable)	d. Oo. of	'n	ġ.	a. Long-Term Avg.	. Value	No. of
X       399         X       399         X       399         X       399	(if available)	Believed Present	Believed Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses	Concentration	Mass	(1) Concentration	(2) Mass	Analyses
	n. Sulfate (as SO <sub>4</sub> ) (14808-79-8)	×		399						1	mg/l				
	(as S)		×												
	p. Sulfite (as SO <sub>4</sub> )		X												
	(14286-46-3)														
			X												
			×												
X       X       0.099       1         X       0.099       1       1         X       0.099       1       1	(/429-90)														
X X 009	s. Barium, Total (7440-39-3)		X												
X       0.09       1         X       0.09       1         X       0.09       1         X       0.09       1	t. Boron, Total (7440-42-8)		×												
X       0.09         X	u. Cobalt, Total (7440-48-4)		X												
x	v. Iron, Total (7439-89-6)	×		0.09						1	mg/l				
	w. Magnesium														
x x <0.01 1	(7439-9 <u>6</u> -4)		X												
x x <0.001	x. Molybdenum Total		×											_	
(7439-96-6) X <0.01 1 Tin, Total (7440-31-5) X (7440-32-6) X (7440-32-6) 1  (7440-32-6) X (7440-32-6) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	y. Manganese,							1000							
Tin, Total (7440-31-5) I. Titanium, Total (7440-32-6)	(7439-96-6)	×		<0.01						1	mg/l				
5)	_ ,		Х												
	aa. Titanium,		<												
	(7440-32-6)		>												

Part C — If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the Testing Required column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Mark "X: in the Believed Absent column for each pollutant you believe to be absent. If you mark either the Testing Required or Believed Present columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

one table (all sever	n pages) for ea	ach outfall. Se	e instruction	one table (all seven pages) for each outfall. See instructions for additional details and requirements.	ails and req		,								
<b>:</b>	ng l	2: MARK "X"				EFF	EFFLUENT				UNITS		INTAKE (	INTAKE (optional)	
POLLUTANT													a.		ъ.
And CAS NO.	æ	ع	ъ.	20.		b. Maximum 30-Day	0-Day	c. Long-Term Avg.	Avg.	d.	1 22 .	, p.	Long-Term Avg Value		No. of
(if available)	Required	Present	Absent	(1) (2)	(2)	(1) (2	(2)	(1)	(2)	Analyses	Сонсениянон	IVIAND	(1)	2	Анагузсз
	,			Concentration	<b>-</b>	Concentration	Mass	ation	Mass				Concentration	Mass	
METALS, CYANIDE AND TOTAL PHENOLS	IDE AND TO	OTAL PHE	NOLS												
1M. Antimony	1														
Total (7440-36-0)	×			<0.000						_	mo/l				
77.4 (-0-0-0)				-0.002							, a				
ZM. Arsenic,	<														
(7440-38-2)	>			<0.001							mg/l				
3M. Beryllium															
1 ota1 (7440-41-7)	<b>×</b>			<0.005						_	mg/l				
4M. Cadmium	;												-	***	
1 otal (7440-43-9)	>			<0.005						_	mø/l				
5M. Chromium				30.000											
Total	×			<n 0.3<="" td=""><td></td><td></td><td></td><td></td><td></td><td>_</td><td>ma/l</td><td></td><td></td><td></td><td></td></n>						_	ma/l				
6M. Conner											C				
Total	X														
(7550-50-8)				<0.01						1	mg/l				
7M. Lead	4														
(7439-92-1)	>			<0.05						1	mg/l				
8M. Mercury	•														
1 otal (7439-97-6)	>			<0.0002						_	mg/l				
9M. Nickel,															
Total (7440-02-0)	>		,	0 009						<b>-</b>	mø/l				
10M. Selenium,															
Total	×									-	1				
11M Silver				0.000							q				
Total	×														
(7440-28-0)				<0.01							mg/l				

LLUTANN   Teining   Relieved	<b>1.</b>		2. MARK "X"				EFF	3. EFFLUENT				4. UNITS		INTAKI	5. INTAKE (optional)	
Required   Present   Absent   On   On   On   On   On   On   On	And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily V		b. Maximum 3 Value (if avail	0-Day	c. Long-Term . Value (if avails	ble)	Z d.	a. Concentration	b. Mass	a. Long-Term Avg	3 Value	No. of
ANDE AND TOTAL PHENOLS (Continued)  AND E AND TOTAL PHENOLS (Continued)  1 mg/l  1 mg/l  1 mg/l  1 mg/l  1 mg/l	(if available)	Required	Present	Absent	$\vdash$		(1) oncentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1) Concentration	(2) Mass	Analyses
00	TETALS, CYAN	TOTAL TOTAL	OTAL PHE	NOLS (Conti												
0)	12M. Thallium, Total	×														
6) X	(7440-28-0)	;			0.1						_	mg/l				
6) X  COUNTY COUNTY A COUNTY DESCRIBE RESULTS: THE COMPOUNDS X X X X X X X X X X X X X Y </td <td>13M. Zinc,</td> <td></td>	13M. Zinc,															
X	(7440-66-6)	>			<0.005						_	mo/l				
X	4M. Cyanide,				100000000000000000000000000000000000000							Q				
CTION—VOLATILE COMPOUNDS  X  X  X  X  X  X  X  X  X  X  X  X  X	(57-12-5)	>			<0.01						_	mg/l				
CHON-VOLATILE COMPOUNDS  X  X  X  X  X  X  X  X  X  X  X  X  X	15M. Phenols,	1														
DESCRIBE RESULTS:  X  CTION - VOLATILE COMPOUNDS  X  X  X  X  X  X  X  X  X  X  X  X  X	Total	×			<0.04						_	mg/l				
CTION - VOLATILE COMPOUNDS  X  X  X  X  X  X	IOXIN				-											
Dioxin   D	2,3,7,8 Tetra-				DESCRIBE RESUL	TS:										
((1784-01-6) ((1784-01-6) ((1794-01-6) ((1797-02-8) ((107402-8) ((	, Dioxin			×												
V. Acrolein (107-02-8)         X           V. Acrolein (107-02-8)         X           V. Acrolein (107-02-8)         X           V. Crylonitrile (107-13-1)         X           Information (107-13-1)         X           V. Bromoform (107-13-1)         X           V. Bromoform (107-13-1)         X           V. Bromoform (107-13-1)         X           V. Carbon (107-13-13-1)         X           V. Carbon (107-13-13-13-13-13-13-13-13-13-13-13-13-13-	(1/84-01-6)															
m )	C/MS FRACTI	ON – VOLA	TILE COMI	POUNDS												
B	V. Acrolein															
B				×												
m m																
m	crylonitrile			×												
B	V. Benzene															
m	(71-43-2)			X												
	5V. Bromoform			*												
	/3-23-2)			×												
	6V. Carbon			¢												
	6-23-5)			>												
7	V. Chloro-															
7	benzene			×												
7	(108-90-7)															
1	8V.															
	hlorodibro-															
	omethane			4												

Digitify of the problem   Digitify of the	T all C - Collegiane		اد				:	١								
ANY   Tailing   Believed   Believed   Believed   Believed   Believed   Believed   Believed   Abbent   Concentration   Mass   Concentration   Concentration   Mass   Concentration   Mass   Concentration   Concentratio	and •	-	MARK "X"				EFF	LUENT				4. UNITS		INTAK	5. INTAKE (optional)	_
Dictor   Required   Present   Absent   Concentration   Mass   Concentration   Co	And CAS NO.	a. Testing	a. Believed	b. Relieved	a. Maximum Daily	Valme	b. Maximum 3 Value (if avai	30-Day	c. Long-Term	Avg.	e d	a.	<b>S</b> p.	a. Long-Term Avş	; Value	b. No. of
Note	(if available)	Required	Present	Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1)	(2)	
In n n n n n n n n n n n n n n n n n n	9V. Chloroethane			×												
Ether  Ether  n  n  hane  hane  ylene  2-Di- ane  yl.	(74-00-3)			,			1.00									
hane hane ylene 2-Di-ane	ethylvinyl Ether (110-75-8)			×												
hane hane ylene ylene	11V.															
hane hane ylene 2-Di- ane	Chloroform (67-66-3)			×												
hane hane ylene y-2-Di- ane	12V. Dichloro-															
hane hane ylene 2-Di- vane yl	(75-71-8)			×												
hane hane ylene 2-Di- vane yl	14V. 1,1-															
hane ylene	Dichloroethane (75-34-3)			×												
hane ylene 2-Di: oo- o- yl .	15V. 1,2-															
ylene ,2-Di: ,anc	Dichloroethane (107-06-2)			×												
ylene ylene o- o- yl .	16V. 1,1-															
2-Di- ane	Dichlorethylene (75-35-4)			×												
o-	17V. 1,2-Di-															
yl .	chloropropane (78-87-5)			×				•				***				
yl ·	18V. 1,3-															
yl .	Dichloropro-			×												
yl	pylene (452-75-6)															
yl .	19V. Ethyl-															
у!	benzene (100-41-4)			×												
	20V. Methyl															
	Bromide (74-83-9)			×												

1.		MARK "X"				EFF	EFFLUENT			-	4. UNITS			5. INTAKE (optional)
And CAS NO.	<b>1</b>	a.		, po		b. Maximum 30-Day	0-Day	c. Long-Term Avg.	Avg.	d.		a.	a. b.	b. Long-Te
(if available)	Required	Present	Absent	(1) (2) Concentration Mass	_	(1) (2) Concentration Ma	(2)	(1)		No. of Analyses	ės –	ies Concentration		Concentration Mass (1)
21V. Methyl Chloride			×		-+	Constitution	1714130	Concentration	171433		_			Concentration Mass
(74-87-3)														
Chloride			×									15		
(2-00-2)	-													
3V. 1,1,2,2-			;							1				
ethane		•	×											
(79-34-5)														
24V.			<											
ethylene (127-18-4)														
25V. Toluene			×											
(108-88-3)									<u>_</u>					
26V. 1,2-Trans-					_				_		_			
Dichloro-			×											
(156-60-5)														
27V. 1,1,1-Tri-			۲							- 1				
(71-55-6)			>											
28V. 1,1,2-Tri-														
chloroethane (79-00-5)	_		×								<u></u>			
29V. Trichloro-														
ethylene (79-01-6)			×											
30V. Vinyl	- 19		<											
CIIIOIIGC			>		_	-	_		_				_	

1. POLLUTANT	And CAS NO.	(if available)	GC/MS FRACTION - ACID COMPOUNDS	1A. 2-Chloro-	phenol (95-57-8)	2A. 2,4-	Dichlor-	Orophenol	34	2,4-Dimeth-	ylphenol (105-67-9)	4A. 4,6-Dinitro-	o-cresol (534-52-1)	5A. 2,4-Dinitro-	phenol (51-28-5)	6A. 2-Nitro-	phenol (88-75-5)	7A. 4-Nitro-	phenol (100-02-7)	8A. P-chloro-m-	cresol (59-50-7)	9A.	Pentachloro-	phenol (87-88-5)	10A. Phenol (108-05-2)	11A. 2,4,6-Tri-	chlorophenol (88-06-2)	GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS	phthene
	a. Testing	Required	ON – ACID (																									)N – BASE/N	
MARK "X"	a. Believed	Present	COMPOUN																									EUTRAL C	
	b. Relieved	Absent	DS		×		×			×			×		×		×		×		×		×		×		×	OMPOUNI	×
	Maximum Daily Value	(1) Concentration																										S	
	Value		1															_				1							
EFFI	b. Maximum 30-Day	(1) (2)																											
3. EFFLUENT	)-Day	(2)																		-		_	-					_	
	c. Long-Term Avg.	(1) (2) (3) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4																											
	Avg.	(2)																											
	, e	Analyses																											
4. UNITS	) , po	Concentration																											
	, p.	VI 455																											
INTAK	a. Long-Term Avg Value	(1)	Concentiation																										
5. INTAKE (optional)	Value	(2)	171.033			-7				-					_														
	No. of	Analyses																											

Part C - Continued	ed										:			
	7	2. MARK "X"				EFFL	3. EFFLUENT				4. UNITS	_	5. INTAKE (optional)	ptional)
POLLUTANT And CAS NO.	'n	<b>a</b> .	b.	a,		b. Maximum 30-Day	-Day	c. Long-Term Avg.	ić Ž	ę.	<b>a</b>	Б.	a. Long-Term Avg Value	b. alue No. of
(if available)	Testing	Believed	Believed	Maximum Daily Value	Value	Value (if available)	ble	Value (if available)		No. of	Concentration	Mass		
(if available)	Required	Present	Absent	(1) Concentration		(1) Concentration	(2) Mass	(1) Concentration	ass —	Analyses			(1) Concentration V	(2) Mass
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)	ON – BASE/N	VEUTRAL (	COMPOUN	OS (Continued)	ŀ		ŀ	}					1	
2B. Acena- phtylene (208-96-8)			x											
3B. Anthra-			<											
cene (120-12-7)			×											
4B. Benzidine			×											
(92-87-5)														
anthracene			×											
6B. Benzo(a)-														
pyrene (50-32-8)			×											
7B. 3,4-Benzo-			<											
(205-99-2)			*											
8B. Benzo(ghl)			<											
(191-24-2)			>											
9B. Benzo(k)-			*											
fluoranthene (207-08-9)			×											
10B. Bis(2-														
<u>`</u>			×											***
methane (111-91-1)														•
11B. Bis			4											
oisopropyi)-			>											
12B. Bis														
(2-ethyl-			<											
phthalate			>											
(117-81-7)														

Part C - Continued  1.		2. MARK "X"				TAAR	3. EFFLUENT				UNITS		AATNI	5.  INTAKE (ontional)
And CAS NO.	a. Testino	a. Relieved	b.	Maximum 3.	47.1	b. Maximum 30-Day	-Day	c. Long-Term Avg.	Avg.	đ.	a	þ.	a. Long-Term Avg Value	ا يوس
(if available)	Required	Present	Absent	(1) (2)	(2)		(2)	(1) (2	(2)	Analyses	Concentration	Mass	(E)	_
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)	DN - BASE/	NEUTRAL	COMPOUN	DS (Continued)	171433	Concenti attori	IVIASS	Concentration	Mass				Concentration	_
13B. 4-Bromo-										_				4
phenyl			×											
(101-55-3)														
14B. Butyl-							-							+
benzyl			×											
(85-68-7)		_												
15B. 2-Chloro-														+
naphthalene (7005-72-3)			×											
16B. 4-Chloro-														+-
phenyl			×						-					
(7005-72-3)													-	
1														- 1
17B. Chrysene (218-01-9)			×											
18B. Dibenzo-														- 1
(a,h)			×											
(53-70-3)														
19B. 1,2-														- 1
benzene			×										-	
(95-50-1)														
20B. 1,3-														- 1
Dichloro-			×											
(541-73-1)														
21B. 1,4-														$\neg$
Dichloro-			×											
benzene (106-46-7)	-			-		-								
22B. 3,3-							+							
Dichloro-			×											
benzidene														
(91-94-1)							1					-		
(91-94-1) 23B. Diethyl	_		<						_					

-		2.			3.			4		<i>x</i> .	
POLLUTANT		V WINDA			EFFLUENT			UNITS		INTAKE (optional)	al)
And CAS NO.	a.	a.	b.		b. Maximum 30-Day	c. Long-Term Avg.	ē.	'n	ġ.	a. Long-Term Avg. Value	No of
(if available)	Required	Present	Absent	∤₹		—  ≝	 } ~	Concentration	Mass	(1) (2)	Analyses
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)	ON – BASE/I	NEUTRAL	COMPOUN	DS (Continued)	Concentiation Mass	Concentration Mass				Concentration Mass	
24B. Dimethyl Phthalate (131-11-3)			×								
25B. Di-N- butyl Phthalate			۲								
(84-74-2)			×								
26B.			;								
toluene			×								
(121-14-2)											
27B.   2,6-Dinitro-			×		2						
toluene			;	-							_
OU0-20-2)											
hthalate			×								
(117-84-0)			:								
29B. 1,2-			<								
hydrazine (as	_		>						_		
azonbenzene)											
10B											
hioranthene			¢								
(208-44-0)			×								
31B. Fluorene		•	×								
(86-73-7)			;							-	
Hexachloro-			<								
benzene			>								
(118-71-1)									_		
Hexachloro-	-		× —								
butadiene			-		-						
(87-68-3)											•
Hexachloro-											
clopenta-			×								
diene					-100			<del></del>			

Part C - Continued	ed	!							j					
<u>-</u>		2. MARK "X"				200	3.				4.		5.	
And CAS NO.		a.	b.	io.		b. Maximum 30-Dav	n_Dav	e I and Tarm			CITAIO		a.	
(if available)	Testing Required	Believed Present	Believed Absent	Maximum Daily Value	Value (2)	Value (if available)	able)	Value (if available)	able)	No. of	a. Concentration	Mass	erm Avg V	Analyses
			 	Concentration	-	Concentration	Mass	Concentration	Mass	Analyses				
35B. Hexachlo-	ON – BASE/I	NEUTRAL (	COMPOUNI	OS (Continued)	-								Concent ation viass	93
roethane (67-72-1)			×											
36B. Indneo-														
(1,2,3-oc)-			×											
Pyrene (193-39-5)					~									_
37B.														
Isophorone (78-59-1)			×							_				
38B.														
Napthalene (91-20-3)			×			_				••				
39B.														
benzene			×										-	
(98-95-3)														-
40B. N-Nitroso-			v		_									
amine			;									_		
(62-75-9)				_										
41B.														
N-IIIII OSOGI-II-			×										•	
(621-64-7)														
42B. N-nitro-														
sodiphenyl-			×											_
(86-30-6)														
43B. Phenan-							-							
threne (85-01-8)	<b></b>		×		<del>-</del>						<del>7</del>			
44B. Pyrene (129-00-0)			×											
45B. 1,2,4 Tri-					-									
chloro-			×											
penzene														

Tarre Continuen	ren														
1.		2. MARK "X"				EFF	3. EFFLUENT				4.		NTAN	5.	
And CAS NO.	. <b>1</b>	'n	ь.	ë.		b. Maximum 3	0-Day	c. Long-Term	Avg.	<b>a</b>		7	a.	a.	b.
(if available)	Testing Required	Believed	Believed	Maximum Daily Value	Value	Value (if available)	lable)	Value (if available)	able)	No. of	Concentration	Mass	Long-Term Avg. value	. value	No. ot Analyses
				Concentration	Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1)	(2)	
GC/MS FRACTION - PESTICIDES	ION - PESTI	CIDES											Concentration	11433	
1P. Aldrin (309-00-2)			×												
2P. α-BHC (319-84-6)			×												
3P. β-BHC (58-89-9)			×												
4P. gamma-BHC (58-89-9)			×												
5P. 8-BHC (319-86-8)			×						-						
6P. Chlordane (57-74-9)			×												
7P. 4,4'-DDT (50-29-3)			×												
8P. 4,4'-DDE (72-55-9)			×												
9P. 4,4'-DDD (72-54-8)			×												
10P. Dieldrin (60-57-1)			×												
Endosulfan (115-29-7)			×												
Endosulfan (115-29-7)			×												
13P. Endosulfan Sulfate (1031-07-8)			×												
(72-20-8)			×												

17P. Heptaclor   X   X     Epoxide   (1024-57-3)   X   X	Testing Required	2.  A. Believed Believed Maximum Daily Value Present Absent (1) (2)  CIDES  X  X  A. Concentration Mass
	P Heptachlor 3- Heptaclor oxide 24-57-3)	× ×
	18P. PCB-1242 (53469-21-9)	×
	19P. PCB-1254 (11097-69-1)	×
	20P. PCB-1221 (11104-28-2)	×
	21P. PCB-1232 (11141-16-5)	×
	22P. PCB-1248 (12672-29-6)	
	23P. PCB-1260 (11096-82-5)	×
75D Tovanhene	24P. PCB-1016 (12674-11-2)	× ×



ERNIE FLETCHER GOVERNOR

#### **ENVIRONMENTAL AND PUBLIC PROTECTION CABINET**

TERESA J. HILL SECRETARY

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601-1190
www.kentucky.gov

October 19, 2007

Randy L. Takcett Sidney Coal company, Inc. P.O. Box 299 Sidney, KY 41564

Re: KPDES Application Notice of Deficiency KPDES No.: KY0107140 Sidney Coal Company Inc. - Bevins Branch Surface Mine AI ID: 85262 Activity ID: APE20070001 Pike County, Kentucky

Dear Mr. Tackett,

Your Kentucky Pollutant Discharge Elimination System (KPDES) permit application for the above-referenced facility was received by the Division of Water on September 10, 2007. A completeness review of your permit application has been conducted and the application has been determined to be incomplete. Please complete the deficiencies listed below and return to me at the following address within thirty (30) days of the date of this letter.

Division of Water, KPDES Branch ATTN: Ms. Sara Beard 14 Reilly Road, Frankfort Office Park Frankfort, Kentucky 40601

1. Complete Section V of Form C (highlighted in yellow) on the enclosed sheet and return. If ponds for this site are not yet constructed and retaining water for sampling, please locate a site with discharges representative of the discharges expected from this site.

Failure to return the requested information within thirty (30) days may result in the Cabinet returning your application to you and retaining filing fees that have been paid, as per 401 KAR 5:300, Section 2(2). If you have any questions concerning this request, please call me at (502) 564-3410, extension 590.

Sincerely,

Sara Beard

Environmental Engineer Assistant III KPDES Branch

Division of Water

SJB

**Enclosures** 

Misty D. Hamilton – Summit Engineering, Inc.

131 Summit Drive Pikeville, KY 41501

Division of Water Files



## September 2007

# Form 1, Form C, and Form HQAA KPDES INDIVIDUAL PERMIT COVERAGE APPLICATION

Sidney Coal Company, Inc. KDMRE PERMIT No. 898-0798 Bevins Branch Surface Mine

Prepared for:

Sidney Coal Company, Inc. P.O. Box 299 Sidney, KY 41564

Prepared by:

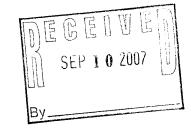
Summit Engineering, Inc. 131 Summit Drive Pikeville, KY 41501 Telephone: (606) 432-1447



#### SUMMIT ENGINEERING, INC.

September 6, 2007

Erin Wright
Inventory & Data Management Section
KPDES Branch
Division of Water
14 Reilly Road
Frankfort, Kentucky 40601



RE:

Sidney Coal Company, Inc. KDMRE Permit No. 898-0798 Bevins Branch Surface Mine

#### Dear Erin:

Please find enclosed copy of a completed Form 1, Form C, and Form HQAA for the above-referenced surface mine to be located in Pike County. Sidney Coal Company seeks approval for Individual Permit coverage under KPDES, for their proposed mining activities.

If you have any questions, or require additional information, please call me at (606) 432-1447 ext. 309 or e-mail mhamilton@summit-engr.com.

Mity D. Hamilton

Misty D. Hamilton

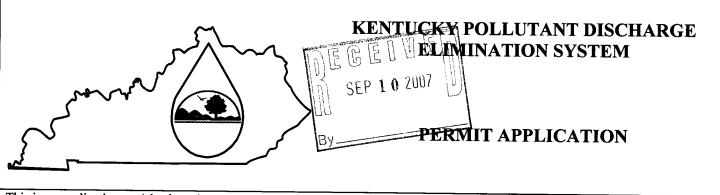
Environmental Project Manager

c: file

enclosure

# **KPDES FORM 1**

AT 85262



<u>~</u>						
This is an application to: (check	one)	A complete application consists of this form and one of the				
Apply for a new permit.		following:				
Apply for reissuance of ex		Form A, Form B, Form C, Form F, or Short Form C				
Apply for a construction p	ermit.					
Modify an existing permit		For additional information contact: $47/1/127$				
Give reason for modificat	ion under Item II.A.	For additional information contact: #240.00				
		AGENCY AGENCY				
I. FACILITY LOCATION AN	D CONTACT INFORMATION	USE 0   0   7   1   4   0				
A. Name of business, municipality, com	pany, etc. requesting permit	1 CSE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Sidney Coal Company, Inc.						
B. Facility Name and Location		C. Facility Owner/Mailing Address				
Facility Location Name:		Owner Name:				
<b>Bevins Branch Surface Mine</b>		Sidney Coal Company, Inc.				
Facility Location Address (i.e. street, roa		Mailing Street:				
Near the junction of Rt. 468 ar	nd Rockhouse Fork Road	P. O. Box 299				
Facility Location City, State, Zip Code:		Mailing City, State, Zip Code:				
Sidney, KY 41564		Sidney, KY 41564				
		Telephone Number:				
		(606) 353-7201				
A. Provide a brief description of	of activities, products, etc: Surface	coal mining				
B. Standard Industrial Classifica	tion (SIC) Code and Description					
Principal SIC Code &						
Description:	1221 Pituminous Cool & Lian	:4- B4:				
2 compton.	1221 – Bituminous Coal & Lign	ite Mining				
Other SIC Codes:						
outer of codes.						
III. FACILITY LOCATION						
	or: 71/ minute and all C					
B. County where facility is located	yey 7 ½ minute quadrangle map for					
	ea:	City where facility is located (if applicable):				
Pike						
C. Body of water receiving disch	arge:					
Big Creek						
D. Facility Site Latitude (degrees		Facility Site Longitude (degrees, minutes, seconds):				
37° 39' 47" N		82° 22' 05" W				
E. Method used to obtain latitude	& longitude (see instructions):	Topographic map coordinates				
F. Facility Dun and Bradstreet N	umber (DUNS #) (if applicable):					

IV. OWNER/OPERATOR INFOR	MATION				
A. Type of Ownership:	_				
Publicly Owned Privatel	y Owned  State Owned	Both Public and P	rivate Owned  Federally owned		
B. Operator Contact Information (Se Name of Treatment Plant Operator:	e instructions)				
Sidney Coal Company, Inc.		Telephone Number:			
Operator Mailing Address (Street):		(606) 353-7201			
P. O. Box 299					
Operator Mailing Address (City, State, Zip Co	de):				
Sidney, KY 41564	· 				
Is the operator also the owner?  Yes No		Is the operator certified	1? If yes, list certification class and number below.		
Yes No Certification Class:		Yes ∐ No			
Certification Class:		Certification Number:			
		L			
V. EXISTING ENVIRONMENTAL	L PERMITS				
Current NPDES Number:	Issue Date of Current Perm	nit·	Evaluation Data (CC)		
VVI0107140		••••	Expiration Date of Current Permit:		
Number of Times Permit Reissued:	Day (CO ) i I D				
rumber of Times I climit Reissued.	Date of Original Permit Iss	suance:	Sludge Disposal Permit Number:		
Ventual DOW O					
Kentucky DOW Operational Permit #:	Kentucky DSMRE Permit	Number(s):			
	898-0798				
C. Which of the following additional of	environmental permit/registra	tion categories will a	also apply to this facility?		
GA TIP CORY			PERMIT NEEDED WITH		
CATEGORY	EXISTING PER	MIT WITH NO.	PLANNED APPLICATION DATE		
Air Emission Source					
The Editional Source					
Solid or Special Waste					
ona or opecial waste					
Hazardous Waste - Registration or Per	mit				
VI. DISCHARGE MONITORING	REPORTS (DMRs)				
KPDES permit holders are required	to submit DMRs to the Divi	ision of Water on a	regular schedule (as defined by the KPDES		
position in the middle of the diff section	u serves to specificativ menti	fy the department, of	fice or individual you designate as responsible		
for submitting DMR forms to the Divis	sion of Water.		y a designate as responsible		
A Name of denortment office or office	following that DAGD	_			
A. Name of department, office or offic	iai submitting DMRs:	Randy Tackett, Ag	gent		
3. Address where DMR forms are to b	e sent (Complete only if odd	:- 1:00     . 0	•••		
B. Address where DMR forms are to b	e sent. (Complete only II addi	ress is different from	mailing address in Section I.)		
OMR Mailing Name:					
	<del></del>				
OMR Mailing Street:					
OMR Mailing City, State, Zip Code:					
OMR Official Telephone Number:					

#### VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

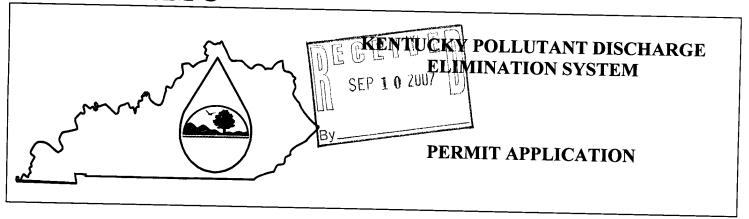
Facility Fee Category:	Filing Fee Enclosed:
Surface Mining Operation	\$240.00

#### VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Randy L. Tackett, Agent	606-353-5500
SIGNATURE	DATE:
Randy L. Tackett	8-22-07

# **KPDES FORM C**



A complete application consists of this form and Form 1. For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Bevins Branch Surface Mine	County: Pike	٦
I. OUTFALL LOCATION	AGENCY USE 0 1 0 7 1 4 c	,

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No.	LATITUDE			LONGITUDE			
(list)	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	RECEIVING WATER (name
D1	37	40	05	82	22	32	Big Creek
D2	37	40	02	82	22	34	Big Creek
D3	37	39	55	82	22	31	Big Creek
D4	37	39	53	82	22	24	Bevins Branch
D5	37	39	53	82	22	16	Bevins Branch
D5A	37	39	52	82	22	04	Bevins Branch
D5B	37	39	41	82	22	04	Bevins Branch
D6	37	39	46	82	22	12	Bevins Branch
D7	37	39	46	82	22	20	Bevins Branch
D8	37	39	46	82	22	20	Bevins Branch
Pond 1A	37	39	47	82	22	07	Bevins Branch

# II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO.	OPERATION(S) CONTI	RIBUTING FLOW	TREATMENT	
(list)	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
<b>D</b> 1	Surface runoff	27.91 cfs (peak)	Sedimentation	1-U
		(pount)	Discharge to surface water	4-A
D2	Surface runoff	13.32 cfs (peak)	Sedimentation	1-U
		(Pown)	Discharge to surface water	4-A
D3	Surface runoff	7.45 cfs (peak)	Sedimentation	1-U
	(peak)		Discharge to surface water	4-A
<b>D4</b>	Surface runoff	18.11 cfs (peak)	Sedimentation	1-U
		(1-0)	Discharge to surface water	4-A
D5	Surface runoff	33.60 cfs (peak)	Sedimentation	1-U
		(poun)	Discharge to surface water	4-A
D5A	Surface runoff	75.92 cfs (peak)	Sedimentation	1-U
		(puni)	Discharge to surface water	4-A
D5B	Surface runoff	50.06 cfs (peak)	Sedimentation	1-U
		(F)	Discharge to surface water	4-A
<b>D6</b>	Surface runoff	14.84 cfs (peak)	Sedimentation	1-U
		(F)	Discharge to surface water	4-A
<b>D</b> 7	Surface runoff	13.90 cfs (peak)	Sedimentation	1-U
		(Pount)	Discharge to surface water	4-A
D8	Surface runoff	7.01 cfs (peak)	Sedimentation	1-U
		- (T)	Discharge to surface water	4-A
Pond 1A	Surface runoff	411.09 cfs (peak)	Sedimentation	1-U
		(F 3mil)	Discharge to surface water	4-A

# II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seas	sonal?
---	--------

Yes (Complete the following table.)	$\boxtimes$	No (Go to Section III.)
-------------------------------------	-------------	-------------------------

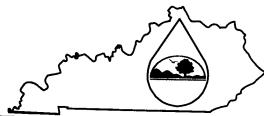
OUTFALL NUMBER	OPERATIONS	FREQU		FLOW					
FLOW		Days Months Per Week Per Year		Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)	
(list)	(list)	(specify average)	(specify average)	Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily		

III.	MAXIMUM I	PRODUCTION	ON					
A. D	Does an effluen	t guideline li	mitation promul	gated by EPA un	der Section 304 of the Clean	Water Act	annly to your fo	oilite 9
				effluent guidelin		4101 7101	appry to your ra	cinty?
	<u></u>	(Go to Secti		<b>3</b>				
B. A			,	guidalina aymrag	ed in terms of production (o	_		
		es (Complete				other mea	sures of operation	on)?
C If	_		•		(Go to Section IV)			
c. II	roduction, expr	essed in the t	tem III-B, list erms and units	the quantity whi used in the applic	ch represents the actual me able effluent guideline, and i	asurement	of your maxim	um level of
				QUANTITY				
Quan	tity Per Day	Units o	of Measure		on, Product, Material, Etc.		Affected Ou (list outfall nu	
					(specify)			
V. I	MPROVEME	ENTS			prity to meet any implemen		· · · · · · · · · · · · · · · · · · ·	
	FICATION OF CAGREEMENT,	CONDITION		ED OUTFALLS ource of Discharge	No (Go to Item IV-B)  BRIEF DESCRIPTION OF	PROJECT	FINAL COMP	
							Required	Projected
pro	gram is now u	nder way or p	may affect vonir	licate your actual	additional water pollution of additional water pollution of which or planned schedules for cor		rams (or other Indicate whether	er each
, B, &	C: See i	instructions be e provided.	efore proceeding	ıg – Complete on	e set of tables for each outfal		e the outfall nun	nber in the
	the space belo	ow to list any or have reason	of the pollutant	s (refer to SARA	Title III, Section 313) listed be discharged from any outfort any analytical data in your	in Table C	44	tions, list,
	POLLUTANT	Γ	SOUR	RCE	POLLUTANT		SOURCE	
	NONE						SOURCE	
						ĺ		j

	Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?						
		Yes (List all such pollutants be	elow)	<b>⊠</b>	No (Go to I	item VI-B)	
В.	Are your o	perations such that your raw mate	erials, proce	esses or products	can reasonably	La avecated to vo	
		or pondumes may during the next.	5 years exce	eed two times the	maximum valu	es reported in Iter	ry so that your m V?
		Yes (Complete Item VI-C)	$\boxtimes$	No (Go to Item	ı VII)		
C.	If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue or additional sheets if you need more space.						

Do you have any knowledge discharges or on a receiving	e of or reason to believe that any bid water in relation to your discharge	ological test for acute or chrowithin the last 3 years?	nic toxicity	y has been made on any of y
_	rify the test(s) and describe their pur		] No	(Go to Section VIII)
		-		
VIII. CONTRACT ANAI	LYSIS INFORMATION			
_	orted in Item V performed by a con		; firm?	
Yes (list the analy	e name, address, and telephone nun zed by each such laboratory or firm	nber of, and pollutants below)	$\boxtimes$	No (Go to Section IX)
NAME	ADDRESS	TELEPHONE (Area code & numb	er)	POLLUTANTS ANALYZED (list)
				THE VIEW (HOL)
X. CERTIFICATION				
certify under penalty of law	that this document and all attachn	nents were prepared under m	v direction	n or congruicion in accorde
	manage the system, or those person knowledge and belief, true, accur neluding the possibility of fine and			e information, the informatere are significant penalties
AME AND OFFICIAL TITI	E (type or print):	TELEPHONE N	UMBER (	(area code and number):
andy L. Tackett, Agent GNATURE		606-353-5500		
ONATURE		DATE		
Road, L. Tackett				

# Form HQAA



# **Kentucky Pollutant Discharge Elimination System (KPDES)**

High Quality water Alternative Analysis

The Anti-degradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5, allows an applicant who does not accept the effluent limitations required by sub-paragraphs 2 and 3 of 5:030, Section 1(2)(b), to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist, and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

Facility	Information			
Name:	Sidney Coal Company, Inc. KDMRE Permit ID. 898-0798	KPDES NO.:	K70107140	
Address:	P. O. Box 299	County:	Pike	
City, State, Zip Code:	Sidney, KY 41564	Receiving Water	Bevins Branch of Big Creek	

II. Alternatives Analysis - For each alternative below, discuss what options were considered and state why these options were not considered feasible.

1. Discharge to other treatment facilities. Indicate which treatment works have been considered and provide the reasons why discharge to these works is not feasible.

Alternative treatment works have been investigated. It would cost over \$ 956,000 (7,775 feet of 24" dia. HDPE pipe at \$ 67/ft. and two lifting stations at \$ 218,000 ea. ) to collect and gather the discharge, from the ten sediment dugouts and one pond, in this proposal. An in-ground collection reservoir would also be required or an above ground tank.

It would also take another \$ 13.1 million to run 24" dia. min. HDPE pipe for 37 miles at \$ 67/ft, plus, over \$ 8.1 million for (37) lifting stations @ one lift station (500,000 gpd) each mile for \$ 218,000 / station, to carry the water discharge to the nearest downstream municipal water treatment plant which is the Martin County Water Treatment Facility, approximately 37 miles away. The Martin County treatment plant would then require a sedimentation basin to remove the silt before even allowing the water to enter their plant.

2. Use of other discharge locations. Indicate what other discharge locations have been evaluated, and the reasons why these locations are not feasible.

As an alternative to discharging into Bevins Branch and Big Creek, Sidney Coal Company examined diverting drainage and runoff into unnamed tributaries of Big Creek, the nearest adjacent drains to the project area. However, any discharge into these alternate drains would ultimately discharge into the Tug Fork of the Big Sandy River, as would any discharge into Bevins Branch. Therefore, the use of these alternate drains would not prevent degradation of water quality in the Tug Fork of the Big Sandy River. Also, gathering and collecting the discharge from the proposed ponds would cost over \$956,000, as stated above. In addition to collecting the discharge, it would cost a minimum of \$207,000 (3,100 feet of 24" diameter HDPE pipe at \$67/ft.) to pump the discharge into the nearest adjacent tributary.

#### II. Alternatives Analysis - continued

3. Water reuse or recycle. Provide information about opportunities for water reuse or recycle at this facility. If water reuse or recycle is not a feasible alternative at this facility, please indicate the reasons why.

Water does play a key part in surface mining operations as far as misting/spraying the area to help alleviate airborne coal dust. However, the amount of water required for dust suppression is minimal compared to the discharge generated. Total watershed drainage area for discharge of dugouts, is over 370.58 acres with a combined peak discharge of over 238,000 gallons per minute. Water used for dust suppression in a day might be 12,000 gallons. Dust suppression is generally only required during dry times when the flow of the surface discharge is low or non-existent. No other water is need for recycling or reuse with this operation.

A small portion of the total discharge generated will be used for hydro-seeding when grade work is completed on this project. The cost has been estimated at over \$ 956,000 dollars to collect this water and to store the large volume generated would only add to the overall cost.

4. Alternative process or treatment options. Indicate what process or treatment options have been evaluated and provide the reasons they were not considered feasible.

Several alternatives to treating water from the project area and discharging it to streams and rivers in the area have been evaluated. These alternatives include construction of a water treatment facility, construction of physical filter barriers, chemical treatment of drainage, and construction of wetlands.

Water Treatment Facility Construction of a small water treatment facility (500,000 gallons per day) on the project site would cost over \$ 1.6 million dollars, plus an additional cost of approximately \$50,000 for a containment reservoir. This water treatment facility would not be able to manage the large amount of water required at this site (over 238,000 gallons per minute).

<u>Physical Filter Barriers</u> Silt fences and straw bales would not be able to handle the large discharge flow generated nor would they meet requirements of Commonwealth of Kentucky's Surface Mine Regulations as stated in 405 KAR 16:070.

<u>Chemical Treatment</u> Chemical treatment of drainage was also considered. However, the primary treatment required at this site is the removal of sediments, which is not possible using chemical treatment.

<u>Wetland Construction</u> Constructed wetlands have traditionally been used for biological treatment. However, the discharge generated by this operation will require sedimentation control measures, and wetlands are not effective for treating sediment. Additionally, wetlands used for water treatment would require a great deal of additional property, which is not available in this particular project area.

## II. Alternatives Analysis – continued

5. On-site or sub-surface disposal options. Discuss the potential for on-site or subsurface disposal. If these options are not feasible, then please indicate the reasons why.

An alternative to surface discharge from the project area is sub-surface disposal. Deep mining has been conducted in vicinity of the project area. Therefore, the sub-surface disposal of drainage from the project area would present safety concerns for any present deep mining operations, and the cost is high, due to a lifting station (\$ 218,000), 24" dia. HDPE pipe to collect discharge (\$ 520,000), and possible drilling (an injection well, depending on depth, could cost up to \$ 50,000 per well to drill), required to inject the discharge underground. Injecting this discharge underground would increase the potential of an outcrop blow-out or blow-out from an old adit and would require a UIC Permit. A suitable place to inject, within a reasonable distance of this site, has not been found.

6. Evaluation of other alternatives to lowering water quality. Describe any other alternatives that were evaluated and provide the reasons why these alternatives were not feasible.

### Other alternatives reviewed were:

- a) accepting a high water quality requirement, and
- b) avoiding the project.

Accepting high water quality requirements would create additional burden and cost to this project because larger ponds would have to be built. For the embankment ponds, this means more disturbances in the streams, larger volumes of water stored behind the embankments, and higher construction/removal costs (approximately \$15,000 per pond).

Avoiding this project would mean that the advantages of economic development in the surrounding small communities such as Sidney, KY, in Pike county would not be realized. At a minimum, 50 local jobs would be lost, the tax base would diminish (\$ 80,834 in severance taxes would not be collected), and local businesses would not prosper to the same extent.

## III. Socio-economic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

This area in Pike County has been previously mined and logged, with the discharge from those areas presently flowing untreated into area streams. Sidney Coal Company, Inc. proposes to build ten dugout ponds and one embankment pond to treat this watershed discharge. The area will also be re-graded to prevent erosion from the previous logging activities.

2. Describe this facility's effect on the employment of the area.

This mining operation would provide employment for an estimated (50) employees. These mining positions will prove to be higher paying jobs than other industries in Pike county, specifically near small communities such as Sidney, KY. The average weekly wage in the mining industry for Pike county is \$887.25. This is compared to the average weekly wage for all other industries in Pike County of \$502.50 (2003 U. S. Bureau of Labor Statistics).

3. Describe how this facility will increase or avoid the decrease of area employment.

The economy in this portion of Pike County is dependent on the Mining Industry. Therefore, this operation will provide for the continuation of higher wage permanent employment in the area work force. This also positively affects the support industries that will help to supply the material and equipment needed for mining, as well as other services such as engineering, and also the training that will be needed for employees to work in the mines. It is likely that a new mine will lead to an increase in employment, but at the very least, the mine will avoid a decrease in local employment figures.

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

The surface mine facility will provide jobs in Pike County, in small communities such as Sidney, KY, and help prevent the loss of jobs when an existing area facility closes or moves to another area. Recovery of the coal, located along Bevins Branch, will produce over 738,200 tons of coal. This will generate over \$538,894 in severance taxes, at approximately \$0.73 cents/ton, of which Pike county will receive a total of over \$80,834 (15 percent). Additional revenue will be given to local businesses generated through increased employment to handle support services catering to the mining operation directly and to the needs of the employees on a daily basis. Local income taxes, property taxes, and sales taxes, will also add to revenue brought in by the mining facility.

These monies will be returned to the community providing funds to help establish alternative industries for additional local employment opportunities, as well as provide for public safety, environmental protection, public transportation, vocational training, local health / recreational / educational facilities, social services, industrial/economic development, workforce training, and the secondary wood industry. Property values increase when land is active. Therefore, when mining is being conducted, the land has an increased value requiring increased property taxes to be paid in to the city operating fund.

This facility will not only provide mining jobs but will also provide jobs that help industry. Equipment sales and repair, mining and engineering consultants, alon transportation providers, will be needed as a result of the mine. The creation of surrounding communities such as Sidney, KY in Pike county, will spur communic creating even more employment opportunites in the local area.  The increased payments of property taxes will benefit schools so that they have for better equipment, improve their facilities, and increased salaries for the teachers increased tax payments will provide additional money for government services to area citizens.	g with fuel and more jobs in the ty development, thus unding to purchase
III. Socio-economic Demonstration - continued	
III. Socio-economic Demonstration – continued	
6. Will this project be likely to change median household income in the county?	Yes No
7. Will this project likely change the market value of taxable property in the county?	
8. Will this project increase or decrease revenues in the county?	
9. Will any public buildings be affected by this system?	
It is estimated that (50) workers will be employed by the project. Thus, (50) he directly affected by the operation. These households will, in turn, affect at least 1 households (75), of local business owners and their employees by purchasing goarea.	<b>#</b> .*
11. How will those households (if any) be <i>economically</i> or <i>socially</i> impacted? (For example, through creation of jobs, educational opportunities, or other social or ec	·
The households of the estimated (50) facility employees will be positively impact average income that these mining jobs will provide. The average weekly wage for new industries in Pike county is \$887.25. The average weekly wage for all other industries in Pike Additionally, many other households will be impacted by the increased business for their employees in Pike county, engineering services, and fuel/transportation provaround small communities such as Sidney, KY. The employees of these support be positively impacted with a more secure place of employment due to the increased mining industry.	or the mining industry se county is \$ 502.50.  or local retailers and iders, particularly

5. Describe any other economic or social benefits to the community.

		Yes	No
12   	. Does this project replace any other methods of sewage treatment to existing facilities? If so, describe how.		$\boxtimes$
	The proposed project is a surface mining operation. There are no existing sewage waste water discharges that this project could replace.		
10		Yes	No
13.	. Does this project treat any existing sources of pollution more effectively? If so, describe how.	$\boxtimes$	
	The discharge proposed in this application amendment will be in areas that have been mined and logged before. Presently, there are approximately 370.58 acres of uncontrolled runoff from this area. Any runoff from these drainage areas into area streams will now be treated by the proposed sediment control structures.		
III.	Socio-Economic Demonstration - continued		
		Yes	No
14.	Does this project eliminate any other sources of discharge or pollutants? If so, describe how.		
	The Bevins Branch watershed has been previously mined and logged. With the re-mining proposed in this project, runoff pollution will be eliminated through reclamation instead of the current uncontroller runoff into area streams.	d	
1	How will the increase in production levels positively affect the socio-economic condition of the area?  The increase in productivity levels is not only providing jobs for this operation at a higher than average weekly mining wage of \$887.25 in Pike county, versus all other industry wages of \$502.50 in Pike county, but will create additional revenue for the existing businesses in and around Pike county. The additional revenue of the local businesses and the severance tax dollars for Pike county generated by this project (over \$80,834 dollars), will provide the local government increased benefits in public safety (law enforcement, fire protection, ambulance services) and also aid in the industrial and economic development in the surrounding communities such as Sidney, KY in Pike county.		
16. I	How will the increase in operational efficiency positively affect the socio-economic condition of the area?		
t c li	The proposed method of coal extraction is the most efficient and economical method for this particular site. This method allows for maximum removal of coal reserves, increasing the amount of tax dollars that contribute to the state and local economy, and providing more jobs for people in the surrounding community. The facility will continue to provide employment to an estimated 50 workers during the ife of the operation. The project will also help to provide as many as 75 additional jobs in other sectors of the economy, such as engineering, fuel, and transportation. Therefore, the proposed mining operations positively affect the local economy more than other industries.		

IV Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title:	Randy L. Tackett, Agent	Telephone No.:	( 606 ) 353- 5500
Signature:	Randy L. Tackett	Date:	9-06-07

## September 2007

# Form 1, Form C, and Form HQAA KPDES INDIVIDUAL PERMIT COVERAGE APPLICATION

Sidney Coal Company, Inc. KDMRE PERMIT No. 898-0798 Bevins Branch Surface Mine

Prepared for:

Sidney Coal Company, Inc. P.O. Box 299 Sidney, KY 41564

Prepared by:

Summit Engineering, Inc. 131 Summit Drive Pikeville, KY 41501 Telephone: (606) 432-1447



### SUMMIT ENGINEERING, INC.

September 6, 2007

Erin Wright
Inventory & Data Management Section
KPDES Branch
Division of Water
14 Reilly Road
Frankfort, Kentucky 40601

RE: Sidney Coal Company, Inc.

KDMRE Permit No. 898-0798 Bevins Branch Surface Mine

Dear Erin:

Please find enclosed copy of a completed Form 1, Form C, and Form HQAA for the above-referenced surface mine to be located in Pike County. Sidney Coal Company seeks approval for Individual Permit coverage under KPDES, for their proposed mining activities.

If you have any questions, or require additional information, please call me at (606) 432-1447 ext. 309 or e-mail mhamilton@summit-engr.com.

Misty D. Hamilton

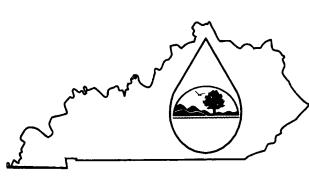
Misty D. Hamilton

**Environmental Project Manager** 

c: file

enclosure

# **KPDES FORM 1**



# KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

## PERMIT APPLICATION

This is an application to: (check one)	A complete application consists of this form and one of the				
Apply for a new permit.	following:				
Apply for reissuance of expiring permit.	Form A, Form B, Form C, Form F, or Short Form C				
Apply for a construction permit.					
Modify an existing permit.	For additional information contact:				
Give reason for modification under Item II.A.	KPDES Branch (502) 564-3410				
	AGENCY				
I. FACILITY LOCATION AND CONTACT INFORMATION	ON USE				
A. Name of business, municipality, company, etc. requesting permit					
Sidney Coal Company, Inc.	LOTE THE OWNER AND ADDRESS OF THE OWNER AND AD				
B. Facility Name and Location	C. Facility Owner/Mailing Address				
Facility Location Name:	Owner Name: Sidney Coal Company, Inc.				
Bevins Branch Surface Mine Facility Location Address (i.e. street, road, etc.):	Mailing Street:				
Near the junction of Rt. 468 and Rockhouse Fork Road	P. O. Box 299				
Facility Location City, State, Zip Code:	Mailing City, State, Zip Code:				
Sidney, KY 41564	Sidney, KY 41564				
Sidney, Tri	Telephone Number:				
	(606) 353-7201				
A. Provide a brief description of activities, products, etc: Sur     B. Standard Industrial Classification (SIC) Code and Description					
Principal SIC Code &	71				
Description: 1221 – Bituminous Coal &	Lignite Mining				
Description.	2-15				
Other SIC Codes:					
Outer pro-cours.					
III. FACILITY LOCATION					
A. Attach a U.S. Geological Survey 7 ½ minute quadrangle ma	up for the site. (See instructions)				
B. County where facility is located:	City where facility is located (if applicable):				
Pike					
C. Body of water receiving discharge:					
Big Creek					
D. Facility Site Latitude (degrees, minutes, seconds):  Facility Site Longitude (degrees, minutes, seconds):					
37° 39' 47" N	82° 22' 05" W				
E. Method used to obtain latitude & longitude (see instructions)	): Topographic map coordinates				
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable	e):				

IV. OWNER/OPERATOR INFORMAT	TION		
A. Type of Ownership:	.1011		
☐ Publicly Owned ☑ Privately Own	ned  State Owned	Both Public and Pr	rivate Owned  Federally owned
B. Operator Contact Information (See inst			
Name of Treatment Plant Operator:		Telephone Number:	
Sidney Coal Company, Inc.		(606) 353-7201	
Operator Mailing Address (Street):			
P. O. Box 299 Operator Mailing Address (City, State, Zip Code):			
Sidney, KY 41564			
Is the operator also the owner?		Is the operator certified	? If yes, list certification class and number below.
Yes ⊠ No □			
Certification Class:		Certification Number:	
V. EXISTING ENVIRONMENTAL PE			
Current NPDES Number:	Issue Date of Current Perr	nit:	Expiration Date of Current Permit:
Number of Times Permit Reissued:	Date of Original Permit Is	suance:	Sludge Disposal Permit Number:
Kentucky DOW Operational Permit #:	Kentucky DSMRE Permit	Number(a)	
Kemacky Dow Operational Femine#.	Remucky DSIVIKE Pelling	. Number(s):	
	898-0798		
C. Which of the following additional enviro	onmental permit/registra	ition categories will a	also apply to this facility?
		· ·	
***************************************			PERMIT NEEDED WITH
CATEGORY	EXISTING PER	MIT WITH NO.	PLANNED APPLICATION DATE
Air Emission Source			
0.11. 0. 1.11.			
Solid or Special Waste			
Hagandaya Wasta Basistantian an Dameit			
Hazardous Waste - Registration or Permit			
VI. DISCHARGE MONITORING REP	ODTS (DMDs)		
		vision of Water on a	manufacturate ( 1 C 11 d VDDDC
nermit) The information in this section ser	ves to specifically identi	ision of water on a	regular schedule (as defined by the KPDES ffice or individual you designate as responsible
for submitting DMR forms to the Division	ves to specifically identi	iry the department, of	fince of individual you designate as responsible
for submitting DIVIK forms to the DIVISION	Ji water.		
		I	
A. Name of department, office or official su	ibmitting DMRs	Randy Tackett, A	gent
,	8	Tanay Tackett, 11	5011
B. Address where DMR forms are to be sen	it. (Complete only if add	lress is different from	mailing address in Section I )
			S access in Section 1.)
DMR Mailing Name:			
		· · · · · · · · · · · · · · · · · · ·	
DMR Mailing Street:			
-		······································	
DMR Mailing City, State, Zip Code:			
DMR Official Telephone Number:			

2

VII.	APPI	ICA	TION	FII	INC	FFF
V 11.	$\alpha$	41.	1 147:4	r.		rrr.

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

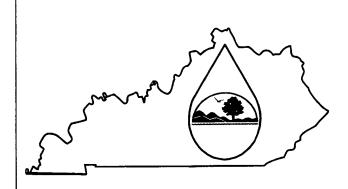
Facility Fee Category:	Filing Fee Enclosed:
Surface Mining Operation	\$240.00

#### VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Randy L. Tackett, Agent	606-353-5500
SIGNATURE	DATE:
Randy L. Tackett	8-22-07

# **KPDES FORM C**



# KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

## PERMIT APPLICATION

A complete application consists of this form and Form 1. For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Bevins Branch Surface Mine	County: Pike
L OUTEAU LOCATION	AGENCY USE
I. OUTFALL LOCATION	USE

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No.	LATITUDE			LONGITUDE			
(list)	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	RECEIVING WATER (name)
D1	37	40	05	82	22	32	Big Creek
D2	37	40	02	82	22	34	Big Creek
D3	37	39	55	82	22	31	Big Creek
D4	37	39	53	82	22	24	Bevins Branch
D5	37	39	53	82	22	16	Bevins Branch
D5A	37	39	52	82	22	04	Bevins Branch
D5B	37	39	41	82	22	04	Bevins Branch
D6	37	39	46	82	22	12	Bevins Branch
<b>D</b> 7	37	39	46	82	22	20	Bevins Branch
D8	37	39	46	82	22	20	Bevins Branch
Pond 1A	37	39	47	82	22	07	Bevins Branch

#### II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO.	OPERATION(S) CONTR	IBUTING FLOW	TREATMENT	
(list)	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
D1	Surface runoff	27.01 of (monk)	Sedimentation	1-U
וע	Surface runon	27.91 cfs (peak)	Discharge to surface water	4-A
D2	Surface runoff	13.32 cfs (peak)	Sedimentation	1-U
D2	Surface (unon	13.32 cis (peak)	Discharge to surface water	4-A
D3	Surface runoff	7.45 cfs (peak)	Sedimentation	1-U
D3	Surface runon	7.43 cis (peak)	Discharge to surface water	4-A
D4	Surface runoff	18.11 cfs (peak)	Sedimentation	1-U
D4	Surface runoff	10.11 cis (peak)	Discharge to surface water	4-A
D5	Surface runoff 33.60 cfs (peak	33.60 cfs (neak)	Sedimentation	1-U
<b>D</b> 3		55.00 cis (pcak)	Discharge to surface water	4-A
D5A	Surface runoff	75.92 cfs (peak)	Sedimentation	1-U
DSA		75.72 cis (peak)	Discharge to surface water	4-A
D5B	Surface runoff	50.06 cfs (peak)	Sedimentation	1-U
DSD	Surface Fundi	50.00 cis (pcak)	Discharge to surface water	4-A
D6	Surface runoff	14.84 cfs (peak)	Sedimentation	1-U
DV		14.04 cis (pcak)	Discharge to surface water	4-A
D7	Surface runoff	13.90 cfs (peak)	Sedimentation	1-U
υ,	Surface runon	15.50 cls (pcak)	Discharge to surface water	4-A
D8	Surface runoff	7.01 cfs (peak)	Sedimentation	1-U
<i>D</i> 0	Surface Fulloff	7.01 cls (peak)	Discharge to surface water	4-A
Pond 1A	Surface runoff	411.09 cfs (peak)	Sedimentation	1-U
I Oliu IA	Surface runoii 411.09 cis (	411.07 cls (peak)	Discharge to surface water	4-A

#### II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

<b>U.</b>	Except for su	offit water fulloff, leaks, of spills, are any c	of the discharges desc	cribed in items II-A or B into	ermittent or seasonar?
		Yes (Complete the following table.)	$\boxtimes$	No (Go to Section III.)	

OUTFALL	OPERATIONS	FREQU	ENCY			FLOW		
NUMBER	CONTRIBUTING FLOW	Days Per Week	Months Per Year	Flow (in n	Rate ngd)		volume vith units)	Duration (in days)
(list)	(list)	(specify average)	(specify average)	Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III	. MAXIMU	JM PRODUC	TION				
A.	Does an eff	luent guideline	limitation promul	gated by EPA unde	r Section 304 of the Clean Water A	Act apply to your fa	ncility?
				effluent guideline		11 3	,
	$\boxtimes$	No (Go to Se			<b>3</b> ,		
B.	Are the lim	itations in the a	applicable effluent	guideline expressed	l in terms of production (or other m	anguras of an austi	\0
			ete Item III-C)	_	so to Section IV)	leasures of operation	on):
C.	If you answ production,	vered "Yes" to expressed in th	o Item III-B, list the terms and units the	the quantity which used in the applicab	represents the actual measureme le effluent guideline, and indicate t	ent of your maxing the affected outfall	num level of s.
				QUANTITY		Affected O	utfalls
Qı	uantity Per D	Day Unit	ts of Measure	Operation	Product, Material, Etc. (specify)	(list outfall n	
<u></u>							
IV.	IMPROV	EMENTS					
	discharges (	rcement compl	is application? Thi	ers, stipulations, co	s or any other environmental pronot limited to, permit conditions, art orders and grant or loan condition.  No (Go to Item IV-B)	administrative or	enforcement
IDE		OF CONDITIO					
	AGREEMI	ENT, ETC.		ED OUTFALLS ource of Discharge	BRIEF DESCRIPTION OF PROJEC		PLIANCE DATI
				g		Required	Projected
	program is n	ow under way	or planned, and ind	discharges) you no licate your actual or	additional water pollution control p w have under way or which you pl planned schedules for constructio	an Indicate whath	er each
<u>V.</u>	INTAKE A	ND EFFLUE	NT CHARACTER	RISTICS			
A, B	3, & C:	space provided	1.		set of tables for each outfall – Anno separate sheets numbered 5-18.	otate the outfall nu	mber in the
	willen you ki	iow or nave rea	ison to believe is di	ischarged or may be	itle III, Section 313) listed in Table discharged from any outfall. For any analytical data in your possess	every pollutant voi	ctions, u list,

POLLUTANT SOURCE POLLUTANT SOURCE

NONE

A.		utant listed in Item V-C a substance ver the next 5 years as an immediate			ance which you use or produce, or expect to use or uct?
		Yes (List all such pollutants belo	ow)		No (Go to Item VI-B)
3.				sses, or products	can reasonably be expected to vary so that your
	discharge of	of pollutants may during the next 5	years exce	eed two times the	maximum values reported in Item V?
	discharge o	of pollutants may during the next 5  Yes (Complete Item VI-C)	years exce	eed two times the	•
<b>.</b>	If you answexpected le	Yes (Complete Item VI-C) wered "Yes" to Item VI-B, explain	below and	No (Go to Iten	•
<u>.</u>	If you answexpected le	Yes (Complete Item VI-C) wered "Yes" to Item VI-B, explain evels of such pollutants which you	below and	No (Go to Iten	1 VII) I to the best of your ability at this time the sources
2.	If you answexpected le	Yes (Complete Item VI-C) wered "Yes" to Item VI-B, explain evels of such pollutants which you	below and	No (Go to Iten	1 VII) I to the best of your ability at this time the sources
	If you answexpected le	Yes (Complete Item VI-C) wered "Yes" to Item VI-B, explain evels of such pollutants which you	below and	No (Go to Iten	1 VII) I to the best of your ability at this time the sources
	If you answexpected le	Yes (Complete Item VI-C) wered "Yes" to Item VI-B, explain evels of such pollutants which you	below and	No (Go to Iten	1 VII) I to the best of your ability at this time the sources

Do you have an discharges or or	y knowledge of or rename in a receiving water in	eason to believe that any bion relation to your discharge	ological test for acute within the last 3 years	or chronic to	oxicity has been made on any of you
	Yes (Identify the	test(s) and describe their pur	poses below)	$\boxtimes$	No (Go to Section VIII)
	·	78			
III. CONTR	RACT ANALYSIS	INFORMATION		······································	
Vere any of the	analyses reported in	Item V performed by a con	traat laboratory or a		0
_				_	n?
	Yes (list the name, analyzed by	, address, and telephone nun each such laboratory or firm	nber of, and pollutan below)	ts	No (Go to Section IX)
NA	ME	ADDRESS	TELEP		POLLUTANTS
			(Area code	& number)	ANALYZED (list)
					1
K. CERTIFICA	ATION				
certify under po	enalty of law that th signed to assure that	qualified personnel properl	y gather and evaluate	the informa	irection or supervision in accorda
certify under point a system defined fith a system or	enalty of law that th signed to assure that persons who manage	qualified personnel properle the system, or those perso	y gather and evaluatens y directly responsib	the information that the	ation submitted. Based on my inquiring the information, the information
certify under point a system define the person or abmitted is, to the certification of the ce	enalty of law that th signed to assure that persons who manag the best of my know	qualified personnel properle the system, or those perso ledge and belief, true, accu	y gather and evaluate ns directly responsib rate, and complete. I	the information the	ation submitted. Based on my inquiring the information, the information that there are significant penalties
certify under point a system de the person or bmitted is, to the bmitting false in the certain the cer	enalty of law that th signed to assure that persons who manage the best of my know information, including	qualified personnel properle the system, or those perso- ledge and belief, true, accu- ng the possibility of fine and	y gather and evaluate ns directly responsib rate, and complete. I imprisonment for k	e the information the for gather am aware the nowing violation	ation submitted. Based on my inquiring the information, the information that there are significant penalties ations.
certify under poith a system defender or	enalty of law that th signed to assure that persons who manag the best of my know information, including	qualified personnel properle the system, or those perso- ledge and belief, true, accu- ng the possibility of fine and	y gather and evaluate ins directly responsible rate, and complete. I imprisonment for known TELEP.	e the information of the for gather am aware the nowing violation.  HONE NUM	ation submitted. Based on my inquiring the information, the information that there are significant penalties
of the person or abmitted is, to the table is to the state of the stat	enalty of law that th signed to assure that persons who manag the best of my know information, including	qualified personnel properle the system, or those perso- ledge and belief, true, accu- ng the possibility of fine and	y gather and evaluate ns directly responsib rate, and complete. I imprisonment for k	e the information of the for gather am aware the nowing violation.  HONE NUM	ation submitted. Based on my inquiring the information, the information that there are significant penalties ations.

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)	EFFLUENT CH	ARACTERIST	ICS (Continued fr	om page 3 of Foi	m C)					OUTFALL NO.		
Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.	provide the results	of at least one a	nalysis for every p	ollutant in this tab	le. Complete one tal	ble for each outfai	II. See instructions	for additional detail	s.			
				2. EFFLUENT				3. UNITS (specify if blank)	TS blank)	4.	4. INTAKE (optional)	
I. POLLUTANT	a. Maximum Daily Value	Daily Value	b. Maximum 30-Day Value (if available)	0-Day Value lable)	c. Long-Term Avg. Value (if available)	Avg. Value able)	d. No. of	a. Concentration	b. Mass	a. Long-Term Avg. Value	vg. Value	ъ.
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1) Concentration	(2) Mass	No of Analyses
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)												
e. Ammonia (as N)												
f. Flow (in units of MGD)	VALUE		VALUE		VALUE				MGD	VALUE		
g. Temperature (winter)	VALUE		VALUE		VALUE				°c	VALUE		
h. Temperature	VALUE		VALUE		VALUE				°င	VALUE		
,	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM				STAN	STANDARD UNITS			
i. pH												

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

Fil

requirements.						,				_				
I. POLLUTANT	MARK	2. MARK "X"			EFI	S. EFFLUENT				UNITS		INTAKE	INTAKE (optional)	
AND CAS NO.	٩	ь.	a. Maximum Daily Value	ly Value	b. Maximum 30-Day Value (if available)	0-Day lable)	c. Long-Term Avg. Value (if available)	Avg. lable)	d. No. of	<b>8</b>	ŗ	a. Long-Term Avg Value	Avg	No. of
(if available)	Believed Present	Believed Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses	Concentration	Mass	(1) Concentration	(2) Mass	Analyses
a. Bromide (24959-67-9)														
b. Bromine Total														
Residual														
c. Chloride														
d. Chlorine,														
l otal Residual														
e Color														
g. Fluoride (16984-48-8)														
h. Hardness (as CaCO <sub>1</sub> )														
i. Nitrate –														
j. Nitrogen,														
		·				·								
k. Oil and														
I. Phosphorous (as P), Total														··········
m. Radioactivity		1												
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium Total		-												
(4) Radium, 226, Total														

MARK *\frac{\chi^2}{a}	Part B - Continued	ed												h	
a. b. Maximum Dally Value (Invitable) Concentration Mass Concentration	1. POLLUTANT		K "X"			EF	3. FLUENT				UNITS		INTAK	INTAKE (optional)	
Believed   Believed   Concentration   Mass   Concentration   Concentra	And CAS NO.		<b>J</b>	a. Maximum Daih	Value	b. Maximum 3 Value (if avai	inble)	c. Long-Tern Value (if ava	n Avg. ilable)	d. No. of	<b>.</b>	<del>.</del>	a. Long-Term Avg. Value	. Value	No. of
	(if available)	Believed Present	Believed Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses	Concentration	Mass	(1) Concentration	(2) Mass	Analyses
c. Suffice       (as S)         (as S)       (be S)         p. Sulfite       (as SO <sub>2</sub> )         q. Surfaciants       (as SO <sub>2</sub> )         c. Aluminum, Total (7429-90)       (as So <sub>2</sub> )         d. Barium, Total (7440-39-3)       (as So <sub>2</sub> )         d. Boron, Total (7440-39-3)       (as So <sub>2</sub> )         d. Boron, Total (7440-39-3)       (as So <sub>2</sub> )         d. Cobalt, Total (7440-39-3)       (as So <sub>2</sub> )         d. Cobalt, Total (7440-39-3)       (as So <sub>2</sub> )         d. Cobalt, Total (7440-39-3)       (as Total (340-98-4)         v. Ion, Total (7439-96-4)       (as Total (340-98-4)         v. Molydehum       (as Total (340-98-4)         v. Malganese, Total (7440-315)       (as Total (340-98-4)         z. Tind, Total (340-98-4)       (as Total (340-98-4															
P. Sulfite (as SO.) (1286-46-3)															
(as SO <sub>4</sub> ) (1286-46-3)  q. Surfactants  r. Aluminum, Total (7429-90)  r. Born, Total (7440-28-4) (7440-28-4) (7440-28-4)  v. Cobalt, Total (7449-89-6) (7439-89-6)  v. Magnesium (7439-89-6) (7439-89-6) (7439-96-6) (7430-76-6) (7439-96-6) (7430-96-	p. Sulfite														
q. Surfactants       q. Surfactants         r. Aluminum, Total       (7429-90)         (7429-90)       (7440-39-3)         s. Barium, Total       (7440-42-8)         (7440-42-8)       (7440-42-8)         u. Cobalt, Total       (7440-42-8)         (7430-89-6)       (7430-89-6)         v. Iron, Total       (7439-96-4)         v. Magnesium       (7439-96-4)         r. Magnesse, Total       (7439-96-6)         v. Mangnesse, Total       (7439-96-6)         z. Tin, Total       (7439-96-6)         z. Tin, Total       (7440-31-5)         z. Tin, Total       (7440-31-6)	(as SO <sub>4</sub> ) (14286-46-3)														
r. Aluminum, Total       Total         (7429-90)       S. Barium, Total         (7440-39-3)       S. Barium, Total         (7440-42-8)       U. Cobalt, Total         (7440-43-4)       V. Icon, Total         (7439-89-4)       V. Icon, Total         (7439-89-4)       V. Icon, Total         (7439-96-4)       V. Magnesium         Total       V. Magnesium         (7439-96-4)       V. Manganese,         Total       V															
Total   (7429-90)   (7429-90)   (7429-90)   (7429-90)   (7429-91															
s. Barium, Total       s. Barium, Total         (7440-39-3)       t. Broon, Total         (7440-42-8)       t. Broon, Total         (7440-42-8)       t. Cobalt, Total         (7440-48-4)       t. Cobalt, Total         (7439-84-6)       t. Total         (7439-96-7)       t. Magnesium         Total       t. Total         (7439-96-7)       t. Manganese, Total         (7439-96-8)       t. Total         (7439-96-7)       t. Total         (7439-96-8)       t. Total         (7439-96-8)       t. Total         (7439-96-8)       t. Total         (7440-31-5)       t. Total         (74	(7429-90)														
t. Boron, Total (7440-42-8)	s. Barium, Total (7440-39-3)														
u. Cobalt, Total (7440-48-4) V. Iron, Total (7439-89-6) w. Magnesium Total (7439-96-4) x. Molybdenum Total (7439-98-7) y. Manganese, Total (7439-98-6) z. Tin, Total (7440-31-5) aa. Titanium, Total (7440-32-6)	t. Boron, Total (7440-42-8)		·												
v. Iron, Total       (7439-89-6)         w. Magnesium       Total         (7439-96-4)       X. Molybdenum         Total       (1439-98-7)         y. Manganese, Total       Total         (7439-96-6)       Z. Tin, Total         (7440-31-5)       Z. Tin, Total         (7440-31-6)       Z. Tin, Total         (7440-31-6)       Z. Tin, Total	u. Cobalt, Total (7440-48-4)		-												
w. Magnesium         Total         (7439-96-4)         x. Molybdenum         Total         (7439-98-7)         y. Manganese,         Total         (7439-96-6)         z. Tin, Total         (7440-31-5)         a. Titanium,         Total         (7440-32-6)	_ [														
(7439-96-4) x. Molybdenum Total (7439-98-7) y. Manganese, Total (7439-96-6) z. Tin, Total (7440-31-5) aa. Titanium, Total (7440-32-6)	w. Magnesium Total														
Total (7439-98-7)  y. Manganese, Total (7439-96-6)  z. Tin, Total (7440-31-5)  aa. Titanium, Total (7440-32-6)	(7439-96-4)														Ī
y. Manganese, Total (7439-96-6) z. Tin, Total (7440-31-5) aa. Titanium, Total (7440-32-6)	Total (7439-98-7)														
(7439-96-6) (7439-96-6)  z. Tin, Total (7440-31-5)  aa. Titanium, Total (7440-32-6)	y. Manganese,														J
z. Tin, Total (7440-31-5) (7440-31-5) aa. Titanium, Total (7440-32-6)	(7439-96-6)														
aa. Titanium, Total (7440-32-6)															
(7440-32-6)	aa. Titanium,														
	(7440-32-6)														

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the Testing Required column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Mark "X: in the Believed Absent column for each pollutant you believe to be absent. If you mark either the Testing Required or Believed Present columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

POLLUTANT And CAS NO.		マンファ >					7214.			,				1
	<b></b>	مة	ŗ	æ		b. Maximum 30-Day	Day	c. Long-Term A	ίσ	d.	æ.	5.	a. Long-Term Avg Value	b. Value No. of
	Testing	Believed	Believed	n Daily V	+-	Value (if available)	3 6	Value (if availa		No. of	Concentration	Mass	(L)	
(II AVAIIADIE) K	equirea	Fresent	Absent	Concentration N	(2) Mass Cone	Concentration	Mass (	Concentration	Mass	Yuan yaca			ation	Mass
METALS, CYANIDE AND TOTAL PHENOLS	E AND TO	TAL PHE	NOLS											
IM. Antimony														
Total				_										
2M. Arsenic.					1		-							
Total														
(7440-38-2)									-					
3M. Beryllium														
(7440-41-7)														
4M. Cadmium														
Total							-							
(7440-43-9)							-							
5M. Chromium					<del></del>									
1 otal (7440-43-9)														
6M. Copper														
Total					-	·								
(/550-50-8)							-							
7M. Lead														
(7439-92-1)														
8M. Mercury														
Total (7430 07 6)														
(/#39-9/-0)									1					
YM. Nickei,														
(7440-02-0)														
10M. Selenium,														
Total (7787-49-7)									_					
11M Silver														
Total												_	_	
(7440-28-0)														

Part C - Continued	ed	2					ω				4			5.	-
1.		MARK "X"				EFFL	EFFLUENT				UNITS		INTAKI	INTAKE (optional)	
And CAS NO.	a.	Relieved	Believed	Maximum Daily Value	Value ———	b. Maximum 30-Day	-Day	c. Long-Term Avg. Value (if available)	Avg.	Z d.	a. Concentration	b.	a. Long-Term Avg Value	Value	No. of
(if available)	Required	Present	Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1) Concentration	(2) Mass	Analyses
METALS, CYANIDE AND TOTAL PHENOLS (Continued)	VIDE AND T	OTAL PHE	NOLS (Cont	inued)											
12M. Thallium,															
1 otal (7440-28-0)					<u> </u>										
13M. Zinc,															
Total (7440-66-6)								٠							
14M. Cyanide,															
(57-12-5)															
15M. Phenols, Total															
DIOXIN															
2,3,7,8 Tetra- chlorodibenzo,				DESCRIBE RESULTS:	JLTS:										
P, Dioxin (1784-01-6)		11 (2)													
GC/MS FRACTION - VOLATILE COMPOUNDS	ION - VOLA	TILE COM	POUNDS												
IV. Acrolein (107-02-8)		•=•													
2V.		,													
Acrylonitrile (107-13-1)															
3V. Benzene (71-43-2)															
5V. Bromoform (75-25-2)															
6V. Carbon Tetrachloride															
7V. Chloro-															
benzene (108-90-7)															
8V. Chlorodibro-									-						
momethane															
(1.01)															

1.		2. MARK "X"				EFI	3. EFFLUENT				4.		INTAKI	5.	
And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily Value	Value —	b. Maximum 30-Day Value (if available)	30-Day	c. Long-Term Avg. Value (if available)	Avg.	d.	a.	, p	a. Long-Term Avg Value	Value	
(if available)	Required	Present	Absent	(1) Concentration		(I)	<b>(2)</b>	(I)	(2)	Analyses	Concentration	CCRIA	(E)	(2)	Analyses
9V. Chloroethane (74-00-3)									174433				Concentration	VIASS	
IOV. 2-Chloro-															
ethylvinyl Ether (110-75-8)															
IIV.					1										
Chloroform (67-66-3)															
12V. Dichloro-															
bromomethane				· · · · ·											
14V. I.I-															
Dichloroethane					**							•			
(75-34-3)											,				
Dichloroethane		-													
(107-06-2)									<b></b>						
16V. 1,1-														_	
Dichlorethylene															
(75-35-4)															
hloropropage			_												
(78-87-5)					•										
18V. 1,3-															
Dichloropro-					****						*				
pylene (452-75-6)															
19V. Ethyl-															
benzene (100-41-4)									_						
20V. Methyl					1				_						
Bromide															

According   Believed   Absent   Concentration   Mass   Concentration   Mass   Concentration   Mass   Concentration   Mass   Concentration   Mass   Concentration   Mass   Concentration   Co	Part C - Continued	d													
Testing Believed Absent Absent Concentration Mass C	<u>.</u>	7	2. 1ARK "X"			EFFI	3. LUENT				UNITS		INTAK	5. E (optiona	=
Treing Believed Maximum Dilly Value Concentration Required Present Absent (1) (2) (2) (3) (3) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	And CAS NO	•	•	4	٥	h Maximum 30		o I one Term	À	<u>.</u>		,	a.	Walling	- 1
Required   Present   Absent   Concentration   Mass   Concentration   Concentration   Mass   Concentration   Concentration   Mass   Concentration   Concentration   Mass   Concentration   Co		Testing	Believed	Believed	Maximum Daily Value	Value (if avails	able)	Value (if avail	able)	No. of	Concentration	Mass	A Section 19	, , ,	Ana
C COECULATION MASS CONCENTATION MASS CONCENTATION MASS		Required	Present	Absent		(1)	(2)	) (E)	(2)	Analyses			(I)	(2)	
Activate (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1443-1) (1433-1) (14	7117 Math.i				+	Concentration	VIRSS	Concentration	Mass				Concentration	MASS	Γ
(74-(7-3))       (22V Methyleriae       (75-(6)-(75))       (75-(6)-(75))       23V 1,1,2,2-1       Fernachioro- cithylene (127-18-4)       (127-18-4)       (24V.       Telerachioro- cithylene (127-18-4)       (127-18-4)       (24V.       24V.       (127-18-4)       (25-(14-17))       (168-68-5)       (168-68-5)       (178-68-7)	Chloride														
22V. Methylene (75-00-2) (	(74-87-3)														
(75-90-2) 23V.1,1,2,2- Erizabloro- elhane (79-34-5) (79-34-5) (24V. (79-34-5) (100-88-3-) (101-18-4	22V. Methylene														
(75-00-2)       23V.1,1,2,2-       Tetrachloro-       chane       (79-34-5)       24V.       Tetrachloro-       chylene       (108-88-3)       26V.1,2-Trans-       Dichloro-       chylene       (108-88-3)       26V.1,2-Trans-       Dichloro-       chylene       (17-15-56)       28V.1,1,2-Tri-       choro-thane       (17-15-10-10-       (19-01-10-       28V.1,1,2-Tri-       (19-01-10-       28V.1,1,2-Tri-       (19-01-00-       28V.1,1,2-Tri-       (19-01-00-       28V.1,1,2-Tri-       (19-01-00-       28V.1,1,1-Tri-       (19-01-00-       28V.1,1,1-Tri-       (19-01-00-       28V.1,1,1-Tri-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00-       (19-01-00- <td>Chloride</td> <td></td>	Chloride														
24V, 1,1,2,2- (Tetrachloro- ethane (19,3,4,5) (24V) (Tetrachloro- ethylene (127-18,4) (1	(75-00-2)														
Tetrachloro-   Ethane	23V. 1,1,2,2-														
ethylene (179-34-5)  24V. Tetachloro- ethylene (127-18-4)  25V. Toluene (107-18-4)  25V. Toluene (108-88-3)  26V. 1,2-Trans- Dichloro- ethylene (105-60-6)  27V. 1,1,1-Tri- chlorochlane (79-00-5)  28V. 1,2-Tri- chlorochlane (79-00-5)  29V. Trichloro- ethylene (79-01-6)  30V. Vinyi	Tetrachloro-				-										
24V.  Tetrachloro- ethylene (127-18-4)  25V. Toluene (127-18-4)  25V. Toluene (108-88-3)  26V. 1,2-Trans- Dichloro- ethylene (156-60-5)  27V. 1,1,1-Tri- chloroethane (79-00-5)  28V. 1,2-Tri- chloroethane (79-00-5)  28V. 1,2-Tri- chloroethane (79-00-5)  28V. 1,2-Tri- chloroethane (79-00-6)  28V. 1,2-Tri- chloroethane (79-00-6)  28V. 1,2-Tri- chloroethane (79-00-6)  28V. 1,2-Tri- chloroethane (79-00-6)  28V. 1,1-Tri- chloroethane (79-00-6)  28V. 1,1-Tri- chloroethane (79-00-6)  28V. 1,1-Tri- chloroethane (79-00-6)	ethane (79-34-5)														
Tetrachloro- ethylene															T
ethylene (127-18-4) (127-18-4) (127-18-4) (127-18-4) (108-88-3) (1	Tetrachloro-														
25V. Toluene (103-88-3) 26V. I,2-Trans- Dichloro- ethylene (156-60-5) 27V. I,1-Tri- chloroethane (71-52-6) 28V. I,1-2-Tri- chloroethane (79-00-5) 29V. Trichloro- ethylene (79-01-6) 20V. Trichloro- Chloride	ethylene														
25V. Toluene (108-88-3) 26V. 1,2-Trans- Dichloro- ethylene (156-60-5) 27V. 1,1,1-Tri- chlorothane (71-52-6) 28V. 1,1,2-Tri- chlorothane (79-00-6) 29V. Trichloro- ethylene (79-01-6) 30V. Vinyl	(127-18-4)														
(103-38-3)  26V 1,2-Trans- Dichloro- ethylene (156-60-5)  27V 1,1,1-Tri- chloro-thane (71-55-6)  28V 1,1,2-Tri- chloro-thane (79-01-5)  29V Trichloro- ethylene (79-01-6)  30V Vinyle	25V Toluene					···						_			
26V. 1,2-Trans-Dichloro-Ethylene (Hylene (156-60-5))       ————————————————————————————————————	(108-88-3)														
Dichloro-	26V. 1,2-Trans-														Ī
ethylene (156-60-5)	Dichloro-														
27V. 1,1,1-Tri- chloroethane (71-55-6) 28V. 1,1,2-Tri- chloroethane (79-00-5) 29V. Trichloro- ethylene (79-01-6) 30V. Vinyl Chloride	ethylene														
chloroethane (71-55-6) 28V. 1,1,2-Tri- chloroethane (79-00-5) 29V. Trichloro- ethylene (79-01-6) 30V. Vinyl Chloride	77V 1 1 1 To:														
(71-55-6)  28V. 1,1,2-Tri- chloroethane (79-00-5)  29V. Trichloro- ethylene (79-01-6)  30V. Vinyl Chloride	chloroethane														
28V. 1,1,2-Tri- chloroethane (79-00-5)  29V. Trichloro- ethylene (79-01-6)  30V. Vinyl Chloride	(71-55-6)														
chloroethane         (79-00-5)         29V. Trichloro-         ethylene         (79-01-6)         30V. Vinyl         Chloride	28V. 1,1,2-Tri-														
29V. Trichloro- ethylene (79-01-6) 30V. Vinyl Chloride	chloroethane														
cthylene (79-01-6) 30V. Vinyl Chloride	79V Trichloro-														
(79-01-6) (79-01-6) 30V. Vinyl Chloride	ethylene														
30V. Vinyl Chloride	(79-01-6)														
Chloride Chl	30V Vinvl										400111				

l.	And CAS NO.	(if available)	GC/MS FRACTION - ACID COMPOUNDS	I.A. 2-Chloro- phenol	(95-57-8)	2A. 2,4- Dichlor-	Oronhenol	(120-83-2)	3A.	2,4-Dimeth-	ylpnenol (105-67-9)	4A. 4,6-Dinitro-	0-cresor (534-52-1)	5A. 2,4-Dinitro-	phenol (51-28-5)	6A 2-Nitro-	phenol	(88-75-5)	7A. 4-Nitro-	(100-02-7)	8A. P-chloro-m-	cresol (59-50-7)	9A.	Pentachloro-	phenol (87-88-5)	IOA Phenol	(108-05-2)	IIA. 2,4,6-Tri-	(88-06-2)	GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS	IB. Acena-	(83-32-9)
	a. Testing	Required	ON - ACID				•																	**						ON - BASE/		
MARK "X"	a. Believed	Present	COMPOUN																											NEUTRAL		
	b. Believed	Absent	DS																											COMPOUN		
	a. Maximum Daily Value	(1) Concentration																												DS		
	ly Value	(2) Mass																														
EFF	b. Maximum 30-Day Value (if available)	(1) Concentration																														
3. EFFLUENT	0-Day able)	(2) Mass													171 6.																	
	c. Long-Term Avg. Value (if available)	(1) Concentration																														
	Avg. lable)	(2) Mass																											·			
	d. No. of	Analyses																														
4. UNITS	a. Concentration																															
	b. Mass																															
INTAK	a. Long-Term Avg Value	(1) Concentration																														
5. INTAKE (optional)	g Value	(2) Mass																														
	No. of Analyses																															

Tening Believed Believed Absent (1) (1) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	POLLUTANT		2. MARK "X"				EFFI	3. EFFLUENT				4. UNITS		5. INTAKE (optional)	tiona
(2) Required Present Abent (1) (2) (0) (1) (2) (1) (2) (1) (2) (1) (2) (1) (2) (1) (2) (1) (2) (1) (2) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2		a. Testing	a. Believed	b. Believed	a. Maximum Daily	Value	b. Maximum 30 Value (if avails	)-Day able)	c. Long-Term Value (if avail	Avg. able)	No. d.	a. Concentration	b. Mass	a. Long-Term Avg Value	=
(CTION - BASENEUTRAL COMPOUNDS (Continued)  (CTION - BASENEUTRAL C		Required	Present	Absent	(1) Concentration	(2) Mass	(1) Concentration	Mass	(1) Concentration	(2)	Analyses				2
2B. Aceaa-	GC/MS FRACTIO	N - BASE/I	NEUTRAL	COMPOUN	DS (Continued)				000000000000000000000000000000000000000					Concentiation	CCRTAI
2026-36-8)   2026-36-8   202	2B. Acena-														Ì
BR. Anthra- (120-12-7)	(208-96-8)														
Center   (110-112-7)   (110-	3B. Anthra-														
### dB caracial	cene (120-12-7)														
Bertzidirie (9247-5)  5B. Bertzo(4)  gathracene (59-525-3)  6B. Bertzo(4)  pyrene (50-525-3)  7B. 3.4-Bertzz- (10-52-8)  7B. 3.4-Bertzz- (10-62-8)  7B. 3.4-Bertz- (10-62-8)  7B. 4.4-Bertz- (10-62-8)  7B. 5.4-Bertz- (10-62-8)  7B. 5.4-Bertz	4R														1
(20.37.5)   (20.	Renzidine														
SB. Benzo(a)- anthracene   (56.25.5)   (	(92-87-5)											-			
(36.55-3) 6B. Benzo(a)- pyrene (50-32-8) 7B. 34-Benzo- fluoranthene (205-99-2) 18B. Benzo(ghl) perylene (205-99-2) 19B. Benzo(k)- fluoranthene (207-08-9) 10B. Bis(2- chlor- corboxy)- methane (111-91-1) 11B. Bis (2-chlor- oisopropyl)- Ether (2B. Bis (2-chlor- oisopropyl)- betyl- Lab. Bis (2-chlor- betyl)- betyl- bety	5B. Benzo(a)-														
68. Benzo(a)- pyrene (30-37-8) 78. 34-Benzo- flooranthene (205-99-2) (191-24-	(56-55-3)														
(90.32-8) 7B. 3,4-Benzo- fluoranthene (205-99-2) 8B. Benzo(ghi) 8B. Benzo(ghi) 9B. Benzo(k)- fluoranthene (207-08-9) 10B. Bis(2- chlor- ochoxy)- methane (11-9)-1) 11B. Bis (2-chlor- oisopropyl)- Elter (2-chlor- isopropyl)- Elter (2-chlor- isopropyl)- hexyl)- hexyl- hexyl- hexyl- phthalae-	6B. Benzo(a)-														
TB. 3,4-Benzo-	(50-32-8)														
Rivoranthene   (205-99-2)   (205-99-2)   (205-99-2)   (205-99-2)   (205-99-2)   (205-99-2)   (205-99-2)   (205-99-2)   (205-99-2)   (205-99-2)   (205-99-2)   (207-88-9)   (	7B. 3,4-Benzo-											100			
8B. Benzo(ghl)       8B. Benzo(ghl)         perylene       (191-24-2)         (191-24-2)       9B. Benzo(k)-         fluoranthene       (207-08-9)         (207-08-9)       10B. Bis(2-         cethor-       cethor-         cethor-       cethor-         (11-91-1)       11B. Bis         (2-chtor-       cisppropyl)-         Ether       12B. Bis         (2-chtyl-       cethyl-         hexyl)-       cethyl-         phthalater       cethyl-	fluoranthene (205-99-2)														
Decylene (191-24-2)	8B. Benzo(ghl)														
9B. Benzo(k)- fluoranthene (207-08-9)  10B. Bis(2- chlor- oethoxy)- methane (111-91-1)  11B. Bis (2-chlor- oisopropyl)- Ether  12B. Bis (2-cityl- hexyl)- phthalate (111-91-1)  12B. Bis (2-cityl- hexyl)- phthalate	(191-24-2)														
Illuorantinene (207-08-9) IOB. Bis(2- chlor- oethoxy)- methane (111-91-1) IIB. Bis (2-chlor- oisopropyl)- Ether IZB. Bis (2-ethyl- hexyl)- phthalate (117-01-1)	9B. Benzo(k)-														
10B. Bis(2-chlor-oethoxy)-methane	(207-08-9)														
cethoxy)- oethoxy)- methane (111-91-1)  11B. Bis (2-chlor- oisopropyl)- Ether  12B. Bis (2-ethyl- hexyl)- phthalate															
methane (111-91-1)  11B. Bis (2-chlor- oisopropyl)- Ether 12B. Bis (2-ethyl- hexyl)- phthalate	oethoxy)-												<del></del>		
(111-91-1) (118. Bis (2-chlor- oisopropyl)- Ether (128. Bis (2-ethyl- hexyl)- phthalate	methane														
(2-chlor-oisopropyl)- Ether  [12B. Bis (2-ethyl-hexyl)- phthalate	(111-91-1)											***************************************			
oisopropyl)- Ether  12B. Bis (2-ethyl- hexyl)- phthalate	11B. Bis														
Ether  12B. Bis (2-ethyl-hexyl)- phthalate	oisopropyl)-														
12B. Bis (2-ethyl- hexyl)- phthalate	Ether														
hexyl)- phthalate	17B Bis														
phthalate	() ethic										<u></u>				
	(2-ethyl- hexyl)-														

Southfull	led	i													
<b></b>		2. MARK "X"				EFF	3. EFFLUENT				4.		INTAKI	5.	
And CAS NO.	•	•	<b>r</b>				,		-				20	a.	b.
:	Testing	Believed	Believed	Maximum Daily Value	y Value	Value (if available)	lable)	c. Long-Term Avg. Value (if available)	Avg. able)	No. of	a.  Concentration	Mass	Long-Term Avg Value	, Value	No. of
(II AVAIIADIE)	Required	Present	Absent	(1)	(2)	(1)	(2)	(I)	(2)	Analyses			(E)	(2)	, j sc s
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)	ON – BASE/I	NEUTRAL	COMPOUN	DS (Continued)	SSRIA	Concentration	Mass	Concentration	Mass				Concentration	Mass	
13B. 4-Bromo-															
phenyl ether		-													
(101-55-3)															
14B. Butyl-															
benzyl															
phthalate (85-68-7)															
15B. 2-Chloro-															
naphthalene															
16B. 4-Chloro-															
phenyl															
7005-72-3)															
(218-01-9)															
18B. Dibenzo-															
(a,h)															
Anthracene (53-70-3)		-:												····	
19B. 1,2-															
Dichloro-											-				
(95-50-1)															
20B. 1,3-															
Dichloro-															
Benzene (541-73-1)													*		
21B. 1,4-															
Dichloro-															
(106-46-7)														<u>.                                    </u>	
22B. 3,3-															
Dichloro-						-									
(91-94-1)									-					<del>-</del>	
23B. Diethyl															
Phthalate (84-66-2)															
( , 30 = /	-														

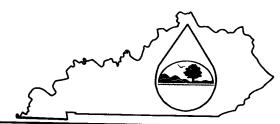
diene (77-47-4)	34B. Hexachloro- cyclopenta-	33B. Hexachloro- butadiene (87-68-3)	32B. Hexachloro- benzene (118-71-1)	31B. Fluorene (86-73-7)	30B. Fluoranthene (208-44-0)	hydrazine (as azonbenzene) (122-66-7)	29B. 1,2- diphenyl-	28B. Di-n-octyl Phthalate (117-84-0)	toluene (606-20-2)	27B.	(121-14-2)	26B. 2,4-Dinitro-	(84-74-2)	25B. Di-N-	Phthalate (131-11-3)	GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)	(if available)	• •	1.	Part C - Continued
																N - BASE/	Required	a. Testing		
																NEUTRAL	Present	a. Believed	2. MARK "X"	
																COMPOUN	Absent	b. Believed		
										٠						DS (Continued)	(1) Concentration	a. Maximum Daily Value		
																	(2) Mass	Value		
																	(1) Concentration	b. Maximum 30-Day Value (if available)	EFF	
												-					(2) Mass	)-Day able)	3. EFFLUENT	
																	(1) Concentration	c. Long-Term Avg. Value (if available)		
							. 10 ***								****		(2) Mass	Avg. able)		
					:												Analyses	d. No. of		
																		a. Concentration	UNITS	
																		Mass		-
																	(1) Concentration	Long-Term Avg. Value	INTAKE (optional)	
																	(2) Mass	Value No. of Analyses	1	

<b>:</b>	And CAS NO.	(if available)	GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)	35B. Hexachlo-	roethane	(0/-/2-1)	36B. indneo-	Pyrene	(193-39-5)	37B.	(78-59-1)	38R	Napthalene	(91-20-3)	39B.	henzene	(98-95-3)	40B. N-Nitroso-	dimethyl-	amine (62-75-9)	41B.	N-nitrosodi-n-	propylamine	42B. N-nitro-	sodiphenyl-	amine (86-30-6)	43B. Phenan-	threne (85-01-8)	44B. Pyrene	(129-00-0)	45B. 1,2,4 Tri-	benzene
7	a. Testing	Required	ON - BASE/																													
2. MARK "X"	a. Believed	Present	NEUTRAL (																													
	b. Believed	Absent	OMPOUN																													
	a. Maximum Daily Value	(1)	DS (Continued)																													
	y Value	(2)																								.,		-				
EFF	b. Maximum 30-Day Value (if available)	(1)																														
3. EFFLUENT	0-Day lable)	(2)																														
	c. Long-Term Avg. Value (if available)	(1)																														
	Avg.	M (2)											•																			
	No. of	Analyses				- American																										
4. UNITS	a. Concentration																															
	b. Mass																															
INTAK	a. Long-Term Avg Value	(1)																														
5. INTAKE (optional)	g Value	(2) Mass					4																·									
I)	b. No. of Analyses																															

		2.					ယ				4.			^	
POLLUTANT		MARK "X"				EFFL	EFFLUENT				UNITS		INTAK	INTAKE (optional)	=
And CAS NO.	a. Testing	a. Believed	b. Believed	Maximum Daily		b. Maximum 30-Day	-Day	c. Long-Term Avg.	ve Ve	, <u>e</u>	) . <b>20</b>	è.	a. Long-Term Avg. Value	. Value	No. of
(if available)	Required	Present	Absent	(1) (2) Concentration Mass			(2)		(2)	Analyses	Concentration	Mass	(E)	(2)	Analyses
GC/MS FRACTION - PESTICIDES	ON - PESTI	CIDES		l ⊦	-	Concentiation	CCUIAI	Concentiation	SSRIA				Concentration	Mass	
1P. Aldrin (309-00-2)															
2P. α-BHC (319-84-6)															
3P. β-BHC (58-89-9)															
4P. gamma-BHC													1		
(38-89-9)			3												
(319-86-8)															
6P. Chlordane (57-74-9)								, - · · ·							
7P. 4,4'-DDT (50-29-3)															
8P. 4,4'-DDE (72-55-9)															
9P. 4,4'-DDD (72-54-8)															
10P. Dieldrin (60-57-1)															
I IP. α- Endosulfan (115-29-7)															
12P. β- Endosulfan (115-29-7)															
13P. Endosulfan Sulfate (1031-07-8)															
14P. Endrin (72-20-8)									_						1

Part C - Continued	CO													
1. POLLUTANT		2. MARK "X"				EFFI	3. EFFLUENT				4. UNITS		5. INTAKE (	5. INTAKE (optional)
And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily	Value	b. Maximum 30-Day Value (if available)	)-Day	c. Long-Term Avg.	Avg.		a.	ь.	a. Long-Term Avg Value	b. Value No. of
(II AVAIIADIE)	Required	Present	Absent	(1) (2)		(E)	(2)	(I)	2	Analyses	Concentration	SSRIA	(L)	(2) Analyses
GC/MS FRACTION - PESTICIDES	ON - PESTI	CIDES		Concentration	141433	Concentration	SSBIA	Concentration	Mass				ation	Mass
15P. Endrin Aldehyde														
(7421-93-4)														
16P Heptachlor			_			_								
(76-44-8)														
17P. Heptaclor														
Epoxide (1024-57-3)														
18P. PCB-1242 (53469-21-9)														
10P PCB-125/														
(11097-69-1)											***			
20P. PCB-1221 (11104-28-2)					<del></del>									
21P. PCB-1232 (11141-16-5)														
22P. PCB-1248 (12672-29-6)														
23P. PCB-1260 (11096-82-5)														
24P. PCB-1016 (12674-11-2)														
25P. Toxaphene (8001-35-2)				····										

# Form HQAA



# **Kentucky Pollutant Discharge Elimination System (KPDES)**

High Quality water Alternative Analysis

The Anti-degradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5, allows an applicant who does not accept the effluent limitations required by sub-paragraphs 2 and 3 of 5:030, Section 1(2)(b), to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist, and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

I. Permit	nformation		
Facility Name:	Sidney Coal Company, Inc. KDMRE Permit ID. 898-0798	KPDES NO.:	
Address:	P. O. Box 299	County:	Pike
City, State, Zip Code:	Sidney, KY 41564	Receiving Water Name:	Bevins Branch of Big Creek
II. Altern	atives Analysis - For each alternative hal		

II. Alternatives Analysis - For each alternative below, discuss what options were considered and state why these options were not considered feasible.

1. Discharge to other treatment facilities. Indicate which treatment works have been considered and provide the reasons why discharge to these works is not feasible.

Alternative treatment works have been investigated. It would cost over \$ 956,000 (7,775 feet of 24" dia. HDPE pipe at \$ 67/ft. and two lifting stations at \$ 218,000 ea. ) to collect and gather the discharge, from the ten sediment dugouts and one pond, in this proposal. An in-ground collection reservoir would also be required or an above ground tank.

It would also take another \$ 13.1 million to run 24" dia. min. HDPE pipe for 37 miles at \$ 67/ft, plus, over \$ 8.1 million for (37) lifting stations @ one lift station ( 500,000 gpd ) each mile for \$ 218,000 / station, to carry the water discharge to the nearest downstream municipal water treatment plant which is the Martin County Water Treatment Facility, approximately 37 miles away. The Martin County treatment plant would then require a sedimentation basin to remove the silt before even allowing the water to enter their plant.

2. Use of other discharge locations. Indicate what other discharge locations have been evaluated, and the reasons why these locations are not feasible.

As an alternative to discharging into Bevins Branch and Big Creek, Sidney Coal Company examined diverting drainage and runoff into unnamed tributaries of Big Creek, the nearest adjacent drains to the project area. However, any discharge into these alternate drains would ultimately discharge into the Tug Fork of the Big Sandy River, as would any discharge into Bevins Branch. Therefore, the use of these alternate drains would not prevent degradation of water quality in the Tug Fork of the Big Sandy River. Also, gathering and collecting the discharge from the proposed ponds would cost over \$956,000, as stated above. In addition to collecting the discharge, it would cost a minimum of \$207,000 (3,100 feet of 24" diameter HDPE pipe at \$67/ft.) to pump the discharge into the nearest adjacent tributary.

### II. Alternatives Analysis - continued

3. Water reuse or recycle. Provide information about opportunities for water reuse or recycle at this facility. If water reuse or recycle is not a feasible alternative at this facility, please indicate the reasons why.

Water does play a key part in surface mining operations as far as misting/spraying the area to help alleviate airborne coal dust. However, the amount of water required for dust suppression is minimal compared to the discharge generated. Total watershed drainage area for discharge of dugouts, is over 370.58 acres with a combined peak discharge of over 238,000 gallons per minute. Water used for dust suppression in a day might be 12,000 gallons. Dust suppression is generally only required during dry times when the flow of the surface discharge is low or non-existent. No other water is need for recycling or reuse with this operation.

A small portion of the total discharge generated will be used for hydro-seeding when grade work is completed on this project. The cost has been estimated at over \$ 956,000 dollars to collect this water and to store the large volume generated would only add to the overall cost.

4. Alternative process or treatment options. Indicate what process or treatment options have been evaluated and provide the reasons they were not considered feasible.

Several alternatives to treating water from the project area and discharging it to streams and rivers in the area have been evaluated. These alternatives include construction of a water treatment facility, construction of physical filter barriers, chemical treatment of drainage, and construction of wetlands.

Water Treatment Facility Construction of a small water treatment facility (500,000 gallons per day) on the project site would cost over \$ 1.6 million dollars, plus an additional cost of approximately \$50,000 for a containment reservoir. This water treatment facility would not be able to manage the large amount of water required at this site (over 238,000 gallons per minute).

 $\frac{Physical\ Filter\ Barriers}{flow\ generated\ nor\ would\ they\ meet\ requirements\ of\ Commonwealth\ of\ Kentucky's\ Surface\ Mine\ Regulations\ as\ stated\ in\ 405\ KAR\ 16:070\ .$ 

<u>Chemical Treatment</u> Chemical treatment of drainage was also considered. However, the primary treatment required at this site is the removal of sediments, which is not possible using chemical treatment.

Wetland Construction Constructed wetlands have traditionally been used for biological treatment. However, the discharge generated by this operation will require sedimentation control measures, and wetlands are not effective for treating sediment. Additionally, wetlands used for water treatment would require a great deal of additional property, which is not available in this particular project area.

II.	Alternatives	Analysis _	continued
	1 titornatives	AHAIVSIS -	COMBINE

5. On-site or sub-surface disposal options. Discuss the potential for on-site or subsurface disposal. If these options are not feasible, then please indicate the reasons why.

An alternative to surface discharge from the project area is sub-surface disposal. Deep mining has been conducted in vicinity of the project area. Therefore, the sub-surface disposal of drainage from the project area would present safety concerns for any present deep mining operations, and the cost is high, due to a lifting station (\$ 218,000), 24" dia. HDPE pipe to collect discharge (\$ 520,000), and possible drilling (an injection well, depending on depth, could cost up to \$ 50,000 per well to drill), required to inject the discharge underground. Injecting this discharge underground would increase the potential of an outcrop blow-out or blow-out from an old adit and would require a UIC Permit. A suitable place to inject, within a reasonable distance of this site, has not been found.

**6. Evaluation of other alternatives to lowering water quality.** Describe any other alternatives that were evaluated and provide the reasons why these alternatives were not feasible.

Other alternatives reviewed were:

- a) accepting a high water quality requirement, and
- b) avoiding the project.

Accepting high water quality requirements would create additional burden and cost to this project because larger ponds would have to be built. For the embankment ponds, this means more disturbances in the streams, larger volumes of water stored behind the embankments, and higher construction/removal costs (approximately \$15,000 per pond).

Avoiding this project would mean that the advantages of economic development in the surrounding small communities such as Sidney, KY, in Pike county would not be realized. At a minimum, 50 local jobs would be lost, the tax base would diminish (\$ 80,834 in severance taxes would not be collected), and local businesses would not prosper to the same extent.

### III. Socio-economic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

This area in Pike County has been previously mined and logged, with the discharge from those areas presently flowing untreated into area streams. Sidney Coal Company, Inc. proposes to build ten dugout ponds and one embankment pond to treat this watershed discharge. The area will also be re-graded to prevent erosion from the previous logging activities.

2. Describe this facility's effect on the employment of the area.

This mining operation would provide employment for an estimated (50) employees. These mining positions will prove to be higher paying jobs than other industries in Pike county, specifically near small communities such as Sidney, KY. The average weekly wage in the mining industry for Pike county is \$887.25. This is compared to the average weekly wage for all other industries in Pike County of \$502.50 (2003 U. S. Bureau of Labor Statistics).

3. Describe how this facility will increase or avoid the decrease of area employment.

The economy in this portion of Pike County is dependent on the Mining Industry. Therefore, this operation will provide for the continuation of higher wage permanent employment in the area work force. This also positively affects the support industries that will help to supply the material and equipment needed for mining, as well as other services such as engineering, and also the training that will be needed for employees to work in the mines. It is likely that a new mine will lead to an increase in employment, but at the very least, the mine will avoid a decrease in local employment figures.

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

The surface mine facility will provide jobs in Pike County, in small communities such as Sidney, KY, and help prevent the loss of jobs when an existing area facility closes or moves to another area. Recovery of the coal, located along Bevins Branch, will produce over 738,200 tons of coal. This will generate over \$538,894 in severance taxes, at approximately \$0.73 cents/ton, of which Pike county will receive a total of over \$80,834 (15 percent). Additional revenue will be given to local businesses generated through increased employment to handle support services catering to the mining operation directly and to the needs of the employees on a daily basis. Local income taxes, property taxes, and sales taxes, will also add to revenue brought in by the mining facility.

These monies will be returned to the community providing funds to help establish alternative industries for additional local employment opportunities, as well as provide for public safety, environmental protection, public transportation, vocational training, local health / recreational / educational facilities, social services, industrial/economic development, workforce training, and the secondary wood industry. Property values increase when land is active. Therefore, when mining is being conducted, the land has an increased value requiring increased property taxes to be paid in to the city operating fund.

_ ا			
3.	Describe any other economic or social benefits to the community.		
	This facility will not only provide mining jobs but will also provide jobs that help support the mining industry. Equipment sales and repair, mining and engineering consultants, along with fuel and transportation providers, will be needed as a result of the mine. The creation of more jobs in the surrounding communities such as Sidney, KY in Pike county, will spur community development, thus creating even more employment opportunites in the local area.  The increased payments of property taxes will benefit schools so that they have funding to purchase better equipment, improve their facilities, and increased salaries for the teachers. In addition, the increased tax payments will provide additional money for government services to better serve the local area citizens.		
III	I. Socio-economic Demonstration – continued		
		V	
6.	Will this project be likely to change median household income in the county?	Yes ⊠	No
	Will this project likely change the market value of taxable property in the county?	$\boxtimes$	
	Will this project increase or decrease revenues in the county?	$\boxtimes$	
9.	Will any public buildings be affected by this system?		$\boxtimes$
	It is estimated that (50) workers will be employed by the project. Thus, (50) households will be directly affected by the operation. These households will, in turn, affect at least 1.5 times additional households (75), of local business owners and their employees by purchasing goods and services in the area.	<b>:</b>	
11. ]	How will those households (if any) be <i>economically</i> or <i>socially</i> impacted? (For example, through creation of jobs, educational opportunities, or other social or economic benefits)		
i H t a	The households of the estimated (50) facility employees will be positively impacted by the higher than average income that these mining jobs will provide. The average weekly wage for the mining industry in Pike county is \$887.25. The average weekly wage for all other industries in Pike county is \$502.50. Additionally, many other households will be impacted by the increased business for local retailers and their employees in Pike county, engineering services, and fuel/transportation providers, particularly around small communities such as Sidney, KY. The employees of these support businesses will be positively impacted with a more secure place of employment due to the increased revenue given by the mining industry.	<b>1</b>	

- 5 -

Revised November 16, 2004

DEP Form

12 December 12	<u>Yes</u>	No
12. Does this project replace any other methods of sewage treatment to existing facilities? If so, describ	be how.	$\boxtimes$
The proposed project is a surface mining operation. There are no existing sewage waste wate discharges that this project could replace.	r	
12 D	<u>Yes</u>	No
13. Does this project treat any existing sources of pollution more effectively? If so, describe how.	$\boxtimes$	
The discharge proposed in this application amendment will be in areas that have been mined a logged before. Presently, there are approximately 370.58 acres of uncontrolled runoff from the Any runoff from these drainage areas into area streams will now be treated by the proposed so control structures.	•	
III. Socio-Economic Demonstration - continued		
	Yes	No
14. Does this project eliminate any other sources of discharge or pollutants? If so, describe how.		
The Bevins Branch watershed has been previously mined and logged. With the re-mining properthis project, runoff pollution will be eliminated through reclamation instead of the current uncrunoff into area streams.	controlled	
15. How will the increase in production levels positively affect the socio-economic condition of the area	1?	
The increase in productivity levels is not only providing jobs for this operation at a higher than weekly mining wage of \$887.25 in Pike county, versus all other industry wages of \$502.50 in Picounty, but will create additional revenue for the existing businesses in and around Pike county additional revenue of the local businesses and the severance tax dollars for Pike county generat this project (over \$80,834 dollars), will provide the local government increased benefits in publ (law enforcement, fire protection, ambulance services) and also aid in the industrial and economic development in the surrounding communities such as Sidney, KY in Pike county.	ike y. The ted by	
6. How will the increase in operational efficiency positively affect the socio-economic condition of the	area?	
The proposed method of coal extraction is the most efficient and economical method for this parsite. This method allows for maximum removal of coal reserves, increasing the amount of tax described that contribute to the state and local economy, and providing more jobs for people in the surrous community. The facility will continue to provide employment to an estimated 50 workers during the operation. The project will also help to provide as many as 75 additional jobs in other of the economy, such as engineering, fuel, and transportation. Therefore, the proposed mining operations positively affect the local economy more than other industries.	ollars inding	

submitted. Based of gathering the infor	on: I certify under penalty of law that this document and all atta- ordance with a system designed to assure that qualified personne on my inquiry of the person or persons who manage the system, mation, the information submitted is, to the best of my knowled e significant penalties for submitting false information, including s.	or those persons di	nd evaluate the information ectly responsible for
Name and Title:	Randy L. Tackett, Agent	Telephone No.:	(606) 353-5500
Signature:	Randy L. Tackett	Date:	9-06-07

## September 2007

# Form 1, Form C, and Form HQAA KPDES INDIVIDUAL PERMIT COVERAGE APPLICATION

Sidney Coal Company, Inc. KDMRE PERMIT No. 898-0798 Bevins Branch Surface Mine

Prepared for:

Sidney Coal Company, Inc. P.O. Box 299 Sidney, KY 41564

Prepared by:

Summit Engineering, Inc. 131 Summit Drive Pikeville, KY 41501 Telephone: (606) 432-1447



## SUMMIT ENGINEERING, INC.

September 6, 2007

Erin Wright
Inventory & Data Management Section
KPDES Branch
Division of Water
14 Reilly Road
Frankfort, Kentucky 40601

RE: Sidney Coal Company, Inc.

KDMRE Permit No. 898-0798 Bevins Branch Surface Mine

Dear Erin:

Please find enclosed copy of a completed Form 1, Form C, and Form HQAA for the above-referenced surface mine to be located in Pike County. Sidney Coal Company seeks approval for Individual Permit coverage under KPDES, for their proposed mining activities.

If you have any questions, or require additional information, please call me at (606) 432-1447 ext. 309 or e-mail mhamilton@summit-engr.com.

Mity D. Hamilton

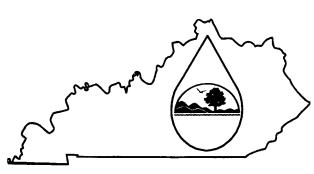
Misty D. Hamilton

**Environmental Project Manager** 

c: file

enclosure

## **KPDES FORM 1**



# KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

## PERMIT APPLICATION

This is an application to: (check	one)	A complete applicat	tion consist	ts of th	is form	and or	ne of the	
Apply for a new permit.		following:						
Apply for reissuance of ex	piring permit.	Form A, Form B, Fo	orm C, For	m F, o	r Short	Form (	2	
Apply for a construction po	ermit.							
Modify an existing permit.	For additional info	rmation c	ontaci	t <b>:</b>				
Give reason for modificati		KPDES Branch (50			•			
		AGENCY	1	<del>Î</del>		T	1	Т
I. FACILITY LOCATION AN	D CONTACT INFORMATION	USE						
A. Name of business, municipality, comp			<b>!</b>	<u> </u>	<u> </u>	<del></del>		
Sidney Coal Company, Inc.								
B. Facility Name and Location		C. Facility Owner	/Mailing A	ddres	<u> </u>			
Facility Location Name:		Owner Name:	///willing /	144100				
Bevins Branch Surface Mine		Sidney Coal Con	nany. Inc					
Facility Location Address (i.e. street, roa	d. etc.):	Mailing Street:	.panj, m	•				
Near the junction of Rt. 468 an		P. O. Box 299						
Facility Location City, State, Zip Code:		Mailing City, State, Zi	ip Code:					
Sidney, KY 41564		Sidney, KY 4156						
<u> </u>		Telephone Number:						
		(606) 353-7201						
B. Standard Industrial Classificat	f activities, products, etc: Surface	coal mining						
Principal SIC Code &								
Description:	1221 – Bituminous Coal & Lign	ite Mining						
						***************************************		
Other SIC Codes:				ļ				
				•				
III. FACILITY LOCATION					-			
A. Attach a U.S. Geological Surv	vey 7 ½ minute quadrangle map for	the site. (See instruct	tions)					
B. County where facility is locate	ed:	City where facility is	s located (i	f appl	icable):			
Pike		,	`		,			
C. Body of water receiving disch	arge:		** ************************************					
Big Creek								
D. Facility Site Latitude (degrees	minutes seconds):	Facility Site Longitu	de (degree	s min	intes se	econds)	•	
37° 39' 47" N	s, influtes, seconds).	82° 22' 05" W	ide (degree	, iiiii	uics, se	,conus j	•	
U		GL LL UJ VV						
E. Method used to obtain latitude	e & longitude (see instructions):	Topographic map o	coordinate	es				
F. Facility Dun and Bradstreet N	umber (DUNS #) (if applicable):							

IV. OWNER/OPERATOR INFOR	MATION		
A. Type of Ownership:  ☐ Publicly Owned ☑ Privately	Owned State Owned	☐ Both Public and Pr	rivate Owned  Federally owned
B. Operator Contact Information (Se			
Name of Treatment Plant Operator:		Telephone Number:	
Sidney Coal Company, Inc. Operator Mailing Address (Street):		(606) 353-7201	
P. O. Box 299			
Operator Mailing Address (City, State, Zip Co	de):		
Sidney, KY 41564 Is the operator also the owner?	<del> </del>	Is the operator certified	1? If yes, list certification class and number below.
Yes No			o 🛛
Certification Class:		Certification Number:	
V. EXISTING ENVIRONMENTAL	L PERMITS		
Current NPDES Number:	Issue Date of Current P	'ermit:	Expiration Date of Current Permit:
Number of Times Permit Reissued:	Date of Original Permit	Issuance:	Sludge Disposal Permit Number:
Kentucky DOW Operational Permit #:	Kentucky DSMRE Peri	mit Number(s):	
	898-0798		
C. Which of the following additional	environmental permit/regis	tration categories will a	also apply to this facility?
CATEGORY	EXISTING P	ERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source			
Solid or Special Waste			
Hazardous Waste - Registration or Pe	rmit		
VI. DISCHARGE MONITORING			
	on serves to specifically ide		a regular schedule (as defined by the KPDES ffice or individual you designate as responsible
A. Name of department, office or office	cial submitting DMRs:	Randy Tackett, A	gent
B. Address where DMR forms are to	be sent. (Complete only if a	ddress is different from	n mailing address in Section I.)
DMR Mailing Name:			
DMR Mailing Street:			
DMR Mailing City, State, Zip Code:			
DMR Official Telephone Number:			

2

Revised June 1999

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KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount. Descriptions of the base fee amounts are given in the "General Instructions."

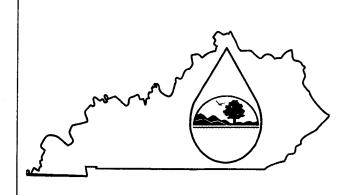
Facility Fee Category:	Filing Fee Enclosed:
Surface Mining Operation	\$240.00

#### VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Randy L. Tackett, Agent	606-353-5500
SIGNATURE	DATE:
Landy L. Tackett	8-22-07

## **KPDES FORM C**



## KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

### PERMIT APPLICATION

A complete application consists of this form and Form 1. For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: Bevins Branch Surface Mine	County: Pike	
I. OUTFALL LOCATION	AGENCY USE	

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No.	LATITUDE				LONGITUDE	1	
(list)	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	RECEIVING WATER (name)
D1	37	40	05	82	22	32	Big Creek
D2	37	40	02	82	22	34	Big Creek
D3	37	39	55	82	22	31	Big Creek
D4	37	39	53	82	22	24	Bevins Branch
D5	37	39	53	82	22	16	Bevins Branch
D5A	37	39	52	82	22	04	Bevins Branch
D5B	37	39	41	82	22	04	Bevins Branch
D6	37	39	46	82	22	12	Bevins Branch
<b>D7</b>	37	39	46	82	22	20	Bevins Branch
D8	37	39	46	82	22	20	Bevins Branch
Pond 1A	37	39	47	82	22	07	Bevins Branch

### II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO.	OPERATION(S) CONTR	UBUTING FLOW	TREATMENT			
(list)	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1		
D1	Surface runoff	27.91 cfs (peak)	Sedimentation	1-U		
		27.51 cis (pcak)	Discharge to surface water	4-A		
D2	Surface runoff	13.32 cfs (peak)	Sedimentation	1-U		
		10.02 els (peak)	Discharge to surface water	4-A		
D3	Surface runoff	7.45 cfs (peak)	Sedimentation	1-U		
		/ To the (peak)	Discharge to surface water	4-A		
D4	Surface runoff	18.11 cfs (peak)	Sedimentation	1-U		
		10:11 ets (peak)	Discharge to surface water	4-A		
D5	Surface runoff	33.60 cfs (peak)	Sedimentation	1-U		
		(F 34.1)	Discharge to surface water	4-A		
D5A	Surface runoff	75.92 cfs (peak)	Sedimentation	1-U		
	24.400	(peak)	Discharge to surface water	4-A		
D5B	Surface runoff	50.06 cfs (peak)	Sedimentation	1-U		
		coros ers (pears)	Discharge to surface water	4-A		
D6	Surface runoff	14.84 cfs (peak)	Sedimentation	1-U		
		The Cole (pearly	Discharge to surface water	4-A		
D7	Surface runoff	13.90 cfs (peak)	Sedimentation	1-U		
		reiso eis (peak)	Discharge to surface water	4-A		
D8	Surface runoff	7.01 cfs (peak)	Sedimentation	1-U		
		els (peak)	Discharge to surface water	4-A		
Pond 1A	Surface runoff	411.09 cfs (peak)	Sedimentation	1-U		
		122105 cis (peak)	Discharge to surface water	4-A		

### II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C.	except for storm water	runoff, leaks, or spills	s, are any of the discharges	described in Items II-A	or B intermittent or seasonal?

	Yes (Complete the following table.)	$\boxtimes$	No (Go to Section III.)
--	-------------------------------------	-------------	-------------------------

OUTFALL	OPERATIONS	FREQUENCY		FLOW				
NUMBER	CONTRIBUTING FLOW	Days Per Week			Flow Rate (in mgd)		Total volume (specify with units)	
(list)	(list)		(specify average)	Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

Α.	Does an efflu	ent guideline	limitation promi	ilgated by EPA ur	der Section 304 of the Clean Wat	er Act apply to your fac	:1:+.·0
				st effluent guidelir		er Act apply to your fac	mity:
	$\boxtimes$	No (Go to See		<b>3</b>			
R			•	• avidalia		_	
В.					sed in terms of production (or other	er measures of operatior	1)?
		Yes (Complet	e Item III-C)	⊠ No	(Go to Section IV)		
C.	If you answer	ered "Yes" to expressed in the	Item III-B, list e terms and units	the quantity who used in the application	ich represents the actual measure cable effluent guideline, and indica	ement of your maximu ate the affected outfalls.	m level of
			MAXIMU	M QUANTITY	······································	Affected Out	falls
Qu	antity Per Da	y Units	s of Measure	Operati	on, Product, Material, Etc. (specify)	(list outfall nun	
							······································
	IMPROVE				ority to meet any implementation		
IDE	NTIFICATION (	OF CONDITION		TED OUTFALLS	No (Go to Item IV-B)  BRIEF DESCRIPTION OF PRO	DJECT FINAL COMPL	JANCE DAT
			No.	Source of Discharge		Required	Projected
	environmental	projects which	h may affect you	ır discharges) you	y additional water pollution contr now have under way or which yo l or planned schedules for constru	u nlan Indicate whether	r each
V.	INTAKE AN	D EFFLUEN	T CHARACTE	RISTICS			
A, B	S	pace provided	•		ne set of tables for each outfall – A		ber in the
	wnich you kno	w or nave reas	son to believe is	discharged or may	A Title III, Section 313) listed in Tobe discharged from any outfall. I ort any analytical data in your pos	For every pollutant you	ions, list,
	POLLUTA	ANT	SOL	IRCE	POLLUTANT	SOURCE	
					- CODO ITALLI	SOURCE	

III. MAXIMUM PRODUCTION

NONE

		Variable 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•		
	<u> </u>	Yes (List all such pollutants below)		No (Go to Item VI-B)	
Are dis	e your op charge o	perations such that your raw materials, prof f pollutants may during the next 5 years e	ocesses, or products o	an reasonably be expected to vary	so that your
Are dis	e your op charge o	perations such that your raw materials, prof f pollutants may during the next 5 years ending.  Yes (Complete Item VI-C)	ocesses, or products occeed two times the No (Go to Item	maximum values reported in Item	so that your V?
If y exp	ou answ	politicants may during the next 5 years e	No (Go to Item	naximum values reported in Item VVII)  to the best of your ability at this tie	v?
If y exp	ou answ	Yes (Complete Item VI-C)  ered "Yes" to Item VI-B, explain below a yels of such pollutants which you anticipa	No (Go to Item	naximum values reported in Item VVII)  to the best of your ability at this tie	v?
If y exp	ou answ	Yes (Complete Item VI-C)  ered "Yes" to Item VI-B, explain below a yels of such pollutants which you anticipa	No (Go to Item	naximum values reported in Item VVII)  to the best of your ability at this tie	v?
If y exp	ou answ	Yes (Complete Item VI-C)  ered "Yes" to Item VI-B, explain below a yels of such pollutants which you anticipa	No (Go to Item	naximum values reported in Item VVII)  to the best of your ability at this tie	V?

VII. BIOLOGI	CAL TOXICITY 1	TESTING DATA			
Do you have any discharges or on a	knowledge of or reas receiving water in r	son to believe that any bio elation to your discharge	logical test for acut within the last 3 year	e or chronic t	oxicity has been made on any of your
	Yes (Identify the tes	t(s) and describe their pur	poses below)	$\boxtimes$	No (Go to Section VIII)
VIII. CONTRA	CT ANALYSIS IN	FORMATION			
				· · · · ·	
		em V performed by a con		•	
	Yes (list the name, ac analyzed by eac	ddress, and telephone num ch such laboratory or firm	ber of, and pollutate below)	nts	No (Go to Section IX)
NAMI	E	ADDRESS	1	PHONE & number)	POLLUTANTS ANALYZED (list)
- V-17		100 100 100 100 100 100 100 100 100 100	(7xrea code	<u>a number)</u>	ANAL I ZED (list)
		· · · · · · · · · · · · · · · · · · ·			
IV CEDTIFICAT	CLON				
IX. CERTIFICAT	ION				
I certify under pen	alty of law that this	document and all attachm	nents were prepared	d under my di	irection or supervision in accordance
of the person or pe	rsons who manage t	he system, or those person	ns directly respons:	ible for gather	ation submitted. Based on my inquiry ring the information, the information
submitted is, to the	best of my knowled	lge and belief, true, accur the possibility of fine and	rate, and complete.	I am aware t	hat there are significant penalties for
	CIAL TITLE (type of				ABER (area code and number):
Randy L. Tackett, A	Agent	•			-5237 (www tode and namoer).
SIGNATURE			DATE	53-5500	
Randy L. T.	ockett		8-2	2-07	

these pages. (See instructions) PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing

												i. pH
			STANDARD UNITS	STAN				MAXIMUM	MUMINIM	MAXIMUM	MINIMUM	
		VALOR	°c				VALUE		VALUE		VALUE	h. Temperature (summer)
		VALUE	ိင				VALUE		VALUE		VALUE	g. Temperature (winter)
		VALUE	MGD				VALUE		VALUE		VALUE	f. Flow (in units of MGD)
												e. Ammonia (as N)
												d. Total Suspended Solids (TSS)
												c. Total Organic Carbon (TOC)
												b. Chemical Oxygen Demand (COD)
												a. Biochemical Oxygen Demand (BOD)
Analyses	(2) Mass	(1) Concentration			Analyses	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	
, p.	Avg. Value	Long-Term Avg. Value	b. Mass	a. Concentration	No. of	Avg. Value able)	c. Long-Term Avg. Value (if available)	30-Day Value ilable)	b. Maximum 30-Day Value (if available)	Daily Value	a. Maximum Daily Value	1. POLLUTANT
	(optional)		TS blank)	3. UNITS (specify if blank)				2. EFFLUENT				
			S.	Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.	all. See instruction	ble for each outfi	ole. Complete one tal	ollutant in this tab	nalysis for every p	s of at least one a	provide the results	Part A - You must
		OUTFALL NO.					rm C)	rom page 3 of Fo	ICS (Continued f	ARACTERIST	EFFLUENT CH	V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C)

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

POLITITANT	2. MARK "X"	"A"			5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3.				4. UNITS		INTAKE	6. E (optional	
AND CAS NO.	20	b.	a. Maximum Daily Value	ly Value	b. Maximum 30-Day Value (if available)	)-Day able)	c. Long-Term Avg. Value (if available)	1 Avg. ilable)	d. No. of	<b>8</b>	<b>Б</b> .	a. Long-Term Avg Value	lγg	b. No. of
(if available)	Believed Present	Believed Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses	Concentration	Mass	(1) Concentration	(2) Mass	Analyses
a. Bromide (24959-67-9)														
b. Bromine Total Residual						_,,								
c. Chloride														
d. Chlorine, Total														
e. Color														
f. Fecal Coliform														
g. Fluoride (16984-48-8)														
h. Hardness (as CaCO <sub>3</sub> )														
i. Nitrate – Nitrite (as N)														
j. Nitrogen, Total Organic (as N)														
k. Oil and Grease														
<ol> <li>Phosphorous (as P), Total</li> <li>7723-14-0</li> </ol>														į
m. Radioactivity			-											
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium Total														
(4) Radium, 226, Total														

Total (7440-32-6)	aa. Titanium,	z. Tin, Total (7440-31-5)	Total (7439-96-6)	y. Manganese,	(7439-98-7)	x. Molybdenum	(7439-96-4)	w. Magnesium	v. Iron, Total (7439-89-6)	(7440-48-4)	u. Cobalt, Total	(7440-42-8)	t. Boron, Total	(7440-39-3)	s. Barium. Total	(7429-90)	Total	q. Surfactants	(14286-46-3)	p. Sulfite	(as S)	o. Sulfide	(14808-79-8)	n. Sulfate	(11 11 11 11 11 11 11 11 11 11 11 11 11	(if available)	Allu CAS NO.	A CAS NO	POLLITANT	Part B - Continued
																									Present	Relieved	Þ		MAR.	ed
						<del></del> -																		•	Absent	Relieved	<del>.</del>	֚֚֓֟֟֝֟֝֟֝֟֓֓֓֓֓֓֓֟֟֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֟֓֓֓֓֓֓֓֓	2. MARK "X"	
																									Concentration	(1)	Maximum Daily Value	•		
																									Mass	(2)	ly Value			
																									Concentration	(1)	Value (if available)	h Maximum 30-Day		
																				 					Mass	(2)	ilable)	30-Dev	EFFLUENT	
																									Concentration	(1)	Value (if available)	c Long-Terr		
																									Mass	(2)	ilable)	n Avg		
				<del>,</del>																					•	Analyses	No. of	a		
																										Concentration	<b>»</b>		4. UNITS	
																										Mass	<b>.</b>			
																									Concentration	Ξ	Long-Term Avg. Value	æ.	INTAK	
																									Mass	3	. Value		3. INTAKE (optional)	
																								_		Analyses	No. of		<b></b>	

either the Testing Required or Believed Present columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements. Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the Testing Required column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in the Believed Present column for each pollutant you believe to be absent. If you mark

Olic table (all seve	in pages) tot ca	acii outian. S	CC HISH UCTION	one table (an seven pages) for each outlant, see instructions for additional details and requirements.	alls allu iet	ultements.									
-		2. MARK "X"				EFF	3. EFFLUENT				UNITS		INTAKE (	5. INTAKE (optional)	
And CAS NO.	'n	Þ	ġ.	po Po		b. Maximum 30-Day	0-Day	c. Long-Term	Avg.	d.	a.	b.	a. Long-Term Avg Value	Value	No. of
:	Testing	Believed	Believed	Maximum Daily Value	Value	Value (if available)	able)	Value (if available)	able)	No. of	Concentration	Mass		<u> </u>	Analyses
(if available)	Required	Present	Absent	) (=)	(2)	) (E)	(2)	3	(2)	Analyses			3	(2)	
				Concentration	Mass	Concentration	Mass	Concentration	Mass				Concentration	Mass	
METALS, CYANIDE AND TOTAL PHENOLS	VIDE AND T	OTAL PHE	NOLS												
IM. Antimony															
(7440-36-0)															
2M. Arsenic,															
Total										-			_		
(7440-38-2)															
3M. Beryllium															
1 otal (7440-41-7)															
4M. Cadmium															
Total															
(/440-43-7)															
Total															
(7440-43-9)															
6M. Copper															
(7550-50-8)			-												
7M. Lead									-						
Total		-													
(7439-92-1)															
8M. Mercury															
Total (7439-97-6)															
9M. Nickel,															
Total															
(7440-02-0)															
10M. Selenium,															
Total															
(1102-17-2)									1						
Tatal															
(7440-28-0)															
1 /												L			

Part C - Continued  1.		2. MARK "X"			_	1343	3. EFFLUENT				4. UNITS		5. INTAKE (	5. INTAKE (optional)	
And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily Value	/alue	b. Maximum 30-Day Value (if available)	-Day ble)	c. Long-Term Avg. Value (if available)	Avg.	No. of	a. Concentration	b. Mass	a. Long-Term Avg Value	Value	Z 5.00,00
(if available)	Required	Present	Absent	(1) Concentration		(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses		· · · · · · · · · · · · · · · · · · ·	(1) Concentration	(2) Mass	Analyses
METALS, CYANIDE AND TOTAL PHENOLS (Continued)	NIDE AND TO	OTAL PHE	NOLS (Cont		1										
12M. Thallium, Total															
(7440-28-0)													:		
13M. Zinc,															
(7440-66-6)								***							
14M. Cyanide,										-					
(57-12-5)															
15M. Phenois, Total														·, · =	
DIOXIN															
2,3,7,8 Tetra-				DESCRIBE RESULTS:	TS:										
P, Dioxin (1784-01-6)															
GC/MS FRACTION - VOLATILE COMPOUNDS	ION - VOLA	TILE COMI	POUNDS												
1V. Acrolein (107-02-8)															
2V. Acrylonitrile										· ···					
3V. Benzene (71-43-2)													:		
5V. Bromoform (75-25-2)										:					
6V. Carbon Tetrachloride (56-23-5)															
7V. Chloro- benzene															
(108-90-/)															
Chlorodibro-					-				····						
momethane															

Part C - Continued	d														
<del></del>		MARK "X"				EFF	3. EFFLUENT				4. UNITS		INTAK	5. INTAKE (optional)	_
And CAS NO.	Þ	'n	Ď.	÷.		b. Maximum 3(	0-Day	c. Long-Term	Avg.	ė.	<b>30</b>	ŗ.	a. Long-Term Avg Value	g Value	No. of
	Testing	Believed	Believed	Maximum Daily Value	y Value	Value (if available)	able)	Value (if available)	able)	No. of	Concentration	Mass	Q	G	Analyses
(if available)	Required	Present	Absent	(1)	(2)	(1)	(2)	(1)	(2)	Analyses			(1)	(2)	
9V.													Concentiation	141000	
Chloroethane									*						
(74-00-3)															
10V. 2-Chloro-															
ethylvinyl Ether															
11V.															
Chloroform															
(67-66-3)															
12V. Dichloro-															
bromomethane			•												
(75-71-8)															
14V. 1,1-															
Dichloroethane															
(75-34-3)															
15V. 1,2-															
Dichloroethane															-
16V 11-															
Dichlorethylene														•	
(75-35-4)															
17V. 1,2-Di-															
chloropropane															
18V. 1,3-													Adjustic la comment of the second of the sec		
Dichloropro-					•										
pylene															
19V Ethyl-															
benzene										-					
(100-41-4)			,												
20V. Methyl															
Bromide										_	-				

I. POLLUTANT		2. MARK "X"				EFFI	3. EFFLUENT				4. UNITS		INTAKE (optional)	ional)
And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily Value	Value	b. Maximum 30-Day Value (if available)	)-Day	c. Long-Term Avg.	Avg.	ğ d	, po	ъ.	a. Long-Term Avg. Value	e b.
(II AVAIIADIE)	Required	Present	Absent	(I)	(2)	(1)	(2)	(1)	(2)	Analyses	Concentration	Mass	(I) (2)	Ļ
21V. Methyl						Concent atton	SCRIA	Concentration	Mass				ation	SS
(74-87-3)														
22V. Methylene														
Chloride														
(75-00-2)										- 154				
23V. 1,1,2,2-														
Tetrachloro-				-										
(79-34-5)										·	<del></del>		<del> </del>	
24V.													-	•
Tetrachloro-														
ethylene (127-18-4)														•
25V. Toluene														
(108-88-3)														
26V. 1,2-Trans-														
Dichloro-														
ethylene											<del></del>			
27V. 1,1,1-Tri-														
chloroethane														
(71-55-6)												_		
28V. 1,1,2-Tri-														
(79-00-5)			·											
29V. Trichloro-							-							
ethylene (79-01-6)														
30V. Vinyl							  -							
Chloride			_	-	-									
(75 01 4)														

rari C - Conunued	50												
	-	2. MARK "X"			3. EFFLUENT	ENT				4.		5.	ntional)
And CAS NO.	<b>p</b>	ņ	ь.	<b>x</b>	b. Maximum 30-I	Dav	c Long-Term	vo	<b>a</b>		,	a.	
(if available)	Testing	Believed	Believed	m Daily V	Value (if available)	ē,	Value (if available)	ble)	No. of	Concentration	Mass	Long-term Avg value	Analyses
	required	1.1636111	Absent	Concentration Mass	(1) Concentration	Mass C	(1) Concentration	X (2)	Analyses				
GC/MS FRACTION - ACID COMPOUNDS	ON - ACID	COMPOUN	DS	1 1		ŀ	ŀ	-				Concentration	SCRIAL
IA. 2-Chloro-						_							
phenol (95-57-8)													
2A. 2,4-						1							
Orophenol								_					
(120-83-2)													
2,4-Dimeth-													
ylphenol (105-67-9)													
4A. 4,6-Dinitro-		, 14				+		-					
o-cresol   (534-52-1)									-				
5A. 2,4-Dinitro-									-				
pnenoi (51-28-5)													
6A. 2-Nitro-						-							
phenol (88-75-5)												76 T	
7A. 4-Nitro-										-			
(100-02-7)													<del>-</del> -
8A. P-chloro-m-													
cresol (59-50-7)													
9A.													
Pentachloro-													
(87-88-5)								Ŧ.i.					
10A. Phenol													
11A. 2,4,6-Tri-								-					
chlorophenol				• • • • • • • • • • • • • • • • • • • •		,							
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS	)N - BASE/N	EUTRAL C	OMPOUND	S									
lB. Acena-	• • •							-					
(83-32-9)													

Part C - Continued	ed														
1.		2. MARK "X"				EFFL	3. EFFLUENT				4. UNITS		5. INTAKE (optional)	optional)	
And CAS NO.	. <b></b>		ァ	<b>20</b>		b. Maximum 30-Day	-Day	c. Long-Term Avg.	Avg.	ç.	Þ	ь.	a. Long-Term Avg Value		No. of
(if available)	Required	Present	Absent	(1) (2)	(2)	(1) (2	(2)	(1)	(2)	Analyses	Concentration	SSRIAL	(i)	2	Analyses
CC/MS FRACTION _ RASE/NEI/TRAIL COMPOSINDS (Continued)	ON - RASE/	SEITPAL	COMPOIN	Continued)	CCRIAI	Concentiation	SCRIA	Сопсепилион	SSRIA				Concentration	VIASS	
JD Anama		TI CHINAL	COMI OCIA	Do (Continued)											
phtylene															······································
3B. Anthra-															
cene (120-12-7)			-											<del></del>	
4B.														+	
Benzidine (92-87-5)															
5B. Benzo(a)-															
anthracene (56-55-3)															
6B. Benzo(a)-															
(50-32-8)						P-1-2									
7B. 3,4-Benzo-															
fluoranthene (205-99-2)		_													
8B. Benzo(ghl)															
perylene (191-24-2)										,,					
9B. Benzo(k)-															
fluoranthene (207-08-9)															
10B. Bis(2-															
oethoxy)-											- 1/4/4				
(111-91-1)															
11B. Bis															
oisopropyl)- Ether															
12B. Bis															
hexyl)-											-			·	
phthalate (117-81-7)											***				

			2.				3							į	
ASNO,   Carting   Billing   Billin	1. POLLUTANT		MARK "X"			-	EFFLUEN	]   			4. UNITS		INTAKI	5. (optional)	
PRACTION - BASE/NEUTRAL COMPOUNDS (Continued)   Mass   Concentration   Concentration   Mass   Concentration   Concentration   Mass   Concentration   Mass   Concentration   Conc	And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily Va		aximum 30-Day ue (if available)	c. Long-Teri Value (if ava	n Avg.	Z p.	a.	Б	a. Long-Term Avg		No. of
ERACTION. BASE/REITRAL COMPOUNDS (Continued)  PRACTION. BASE/REITRAL COMPOUNDS (Continued)  Proposed by the continued of the	(1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	Nequired	rresent	Absent		ر 		,		Analyses		71433	(I)		Analys
Display   Disp	GC/MS FRACTI	ON - BASE/I	NEUTRAL	COMPOUNI	┤┟	l		H	SCRIA				Concentration	Mass	
(101-45-1) 1418 Bulyi-	phenyl														
Hall Blank -   Hall	Phenyl ether (101-55-3)														
Patrician   Patr	14B. Butyl-														
St-Schron   St-S	benzyl					_	<del></del> -		_						
TRUESTREEN   TRU	phthalate (85-68-7)				-						<u>.</u>				
CROSS-72-3)	15B. 2-Chloro-														
168 +Chloro-   168	naphthalene (7005-72-3)		·····	<del>.</del>								_			
T/B. Chrysene     17B. Chrysene       218-01-9)     218-01-90       18B. Dhelhyl     218-01-90       17B. Chrysene     218-01-90       17B. Chrysene </td <td>16B. 4-Chloro-</td> <td></td> <td>_</td> <td></td>	16B. 4-Chloro-													_	
7005-72-219	phenyl					_							•		
TB. Chrysene	(7005-72-3)	-						-							
Till Chrysene   Till Chrysen												_			
18B. Diberizo- a.h) Anthracene S3-70-3) S1-70-3)	17B. Chrysene 218-01-9)					·	<u>.</u>					-			
untracene (170-3) 98 1.2- 998 1.2- 998 1.3- Dichloro- enzare (181-4-7) Dichloro- Dichl	8B. Dibenzo-														
S1-70-3	a,h)														
98. 1,2- 98. 1,2- 98. 1,2- 99.	Anthracene 53-70-3)														
Dichloro-   Part   Pa	9B. 1,2-														
95-30-1) 95-30-1) 95-30-1) 95-30-1) 95-30-1 95	Jichloro-					-									
OB. 1,3- Observation       Genzene Genzene       1B. 1,4- Observation	95-50-1)														
enzene 41-73-1)  1B. 1,4-  ichloro- enzene 06-46-7)  1B. 3,3- ichloro- ichloro- ichloro- inzidene 11-94-1)  1B. Diethyl  1B. Diethyl	OB. 1,3-									_					
41-73-1)	enzene		_	· _	_					-					
ichloro- ichloro- inzene 06-46-7)  B. 3,3- ichloro- ichloro- ichloro- ichloro- inzidene 1-94-1)  B. Diethyl ithalate	B 14-														
nzene (06-46-7) (B. 3.3- (chloro- nzidene 1-94-1) (B. Diethyl (thalate	ichloro-						<u>-</u>								
B. 3,3- ichloro- inzidene 1-94-1) B. Diethyl B. Diethyl	nzene 06-46-7)													•	
nzidene nzidene 1-94-1) B. Diethyl thalate	2B. 3,3-														
1-94-1) B. Diethyl thalate	nzidene	•		<del></del>											
thalate	1-94-1)														
	Phthalate						<u> </u>					_		-	

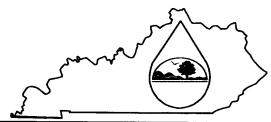
-		2. MARK "X"				EFF	3. EFFLUENT			4.			S	
And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily Value	Value —	b. Maximum 30-Day Value (if available)	Day	c. Long-Term Avg.	ę.	) 20	5	a. Long-Term Avg. Value	a. erm Avg. Value	No. of
(II AVAIIADIE)	Required	Present	Absent	(1) Concentration		(I)	(2)	}	Analyses	Concentration	SSRIA	(E)	(2)	Analyses
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)	ON - BASE/	NEUTRAL	COMPOUN	S (Continued)	⊢	Concentiation	CCRIA	Concentration Mass	SS			Concentration	Mass	
24B. Dimethyl Phthalate			_											
(131-11-3)														
25B. Di-N-					-									
(84-74-2)														
26B.												-		
2,4-Dinitro-														
toluene														
(121-14-2)									-					
2/B. 2.6-Dinitro-														
toluene														
(606-20-2)														
28B. Di-n-octyl														
(117-84-0)	,											·		
29B. 1,2-					+									
diphenyl-								_						
hydrazine (as							_							
azonbenzene) (122-66-7)							-							
30B.			-		+								!	ı
Fluoranthene (208-44-0)					<u> </u>	***								
2					-									
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32B.					-						_			
Hexachloro-											<del></del>			
(118-71-1)				<u></u>										
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(87-68-3)			v											
34B. Hexachloro-	-				-									
cyclopenta-														
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And CAS NO.  a.  Testing (if available)  GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (Continued)  Testing Believed Absent (1)  Concentration Continued)	a. Believed Be Present A	b. Believed Absent	Maximum Daily Value  (1)  Concentration  Mass	b. Maximum 30-Day  e Value (if available)  (1) (2)  S Concentration Max	ailable) (2) Mass	c. Long-Term Avg. Value (if available) (1) (2) Concentration Ma	lvg. ble) (2) Mass	d. No. of Analyses	a. Concentration	b. Mass		Long-Term Avg Value (1) (2)
ilable) Required Pre FRACTION - BASE/NEUT xachlo-	sent A	bsent	<del>-</del>  =	S		Value (if availa (1) Concentration	(2) Mass	No. of Analyses	Conce	ntration		Mass
FRACTION - BASE/NEUT	TRAL COM	DOLLAR Sell.	<u> </u>		1	Concentration	Mass	Analyses				
FRACTION - BASE/NEUT	TRAL COM	PINE PROPERTY.	-	ŀ	1	-						Concentration
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(67-72-1)			-									
36B. Indneo-												
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(193-39-5)	<del></del>											
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propylamine (621-64-7)												
42B. N-nitro-									-			
sodiphenyl-												
amine (86-30-6)												
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(85-01-8)												
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(129-00-0)												
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I.		MARK "X"				EFI	3. EFFLUENT				4.		S.	
And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily Value	Value	b. Maximum 30-Day Value (if available)	0-Day	c. Long-Term Avg.	, ve	d.		ь.	a. Long-Term Avg. Value	No. of
(ii avaliadie)	Required	Present	Absent	(1) Concentration	Mass	(I)	(3)		(2)	Analyses	Concentiation	SSRIA	(1) (2)	Analyses
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1P. Aldrin (309-00-2)														
2P α-BHC (319-84-6)														
3P. β-BHC (58-89-9)														
4P. gamma-BHC (58-89-9)														
5P. δ-BHC (319-86-8)														
6P. Chlordane (57-74-9)														
7P. 4,4°-DDT (50-29-3)														
8P. 4,4'-DDE (72-55-9)														
9P. 4,4'-DDD (72-54-8)														
10P. Dieldrin (60-57-1)														
11P. α- Endosulfan (115-29-7)														
12P. β- Endosulfan (115-29-7)														
13P. Endosulfan Sulfate (1031-07-8)														
(72-20-8)				-					-			1		

Part C - Continued	ed													
1. POLLUTANT		2. MARK "X"				3. EFFLUENT				4. UNITS		5.	optional)	
And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily Value	b. Maximum 30-Day	ım 30-Day available)	c. Long-Term Avg.	Avg.	g d.	a.	,	a. Long-Term Avg Value	b. 'alue No. of	۵,
(II AVAHADIC)	Required	Present	Absent	(1) (Concentration M	5		(1)		Analyses	Concentration	SSRIAL	(E)	(2) Analyses	yses
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15P. Endrin Aldehyde														
(7421-93-4)														
16P Heptachlor														$\perp$
(76-44-8)														
17P. Heptaclor														
(1024-57-3)														
18P. PCB-1242				****										
(11097-69-1)														
20P. PCB-1221 (11104-28-2)	•				,									
21P. PCB-1232	·													
(11141-16-5)														
22P. PCB-1248 (12672-29-6)														
23P. PCB-1260 (11096-82-5)														
24P. PCB-1016 (12674-11-2)			-											
25P. Toxaphene (8001-35-2)		W-2												
														L

## Form HQAA



# **Kentucky Pollutant Discharge Elimination System (KPDES)**

High Quality water Alternative Analysis

The Anti-degradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5, allows an applicant who does not accept the effluent limitations required by sub-paragraphs 2 and 3 of 5:030, Section 1(2)(b), to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist, and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

#### I. Permit Information

Facility Name:	Sidney Coal Company, Inc. KDMRE Permit ID. 898-0798	KPDES NO.:	
Address:	P. O. Box 299	County:	Pike
City, State, Zip Code:	Sidney, KY 41564	Receiving Water Name:	Bevins Branch of Big Creek

II. Alternatives Analysis - For each alternative below, discuss what options were considered and state why these options were not considered feasible.

1. Discharge to other treatment facilities. Indicate which treatment works have been considered and provide the reasons why discharge to these works is not feasible.

Alternative treatment works have been investigated. It would cost over \$ 956,000 (7,775 feet of 24" dia. HDPE pipe at \$ 67/ft. and two lifting stations at \$ 218,000 ea. ) to collect and gather the discharge, from the ten sediment dugouts and one pond, in this proposal. An in-ground collection reservoir would also be required or an above ground tank.

It would also take another \$ 13.1 million to run 24" dia. min. HDPE pipe for 37 miles at \$ 67/ft, plus, over \$ 8.1 million for (37) lifting stations @ one lift station (500,000 gpd) each mile for \$ 218,000 / station, to carry the water discharge to the nearest downstream municipal water treatment plant which is the Martin County Water Treatment Facility, approximately 37 miles away. The Martin County treatment plant would then require a sedimentation basin to remove the silt before even allowing the water to enter their plant.

2. Use of other discharge locations. Indicate what other discharge locations have been evaluated, and the reasons why these locations are not feasible.

As an alternative to discharging into Bevins Branch and Big Creek, Sidney Coal Company examined diverting drainage and runoff into unnamed tributaries of Big Creek, the nearest adjacent drains to the project area. However, any discharge into these alternate drains would ultimately discharge into the Tug Fork of the Big Sandy River, as would any discharge into Bevins Branch. Therefore, the use of these alternate drains would not prevent degradation of water quality in the Tug Fork of the Big Sandy River. Also, gathering and collecting the discharge from the proposed ponds would cost over \$956,000, as stated above. In addition to collecting the discharge, it would cost a minimum of \$207,000 (3,100 feet of 24" diameter HDPE pipe at \$67/ft.) to pump the discharge into the nearest adjacent tributary.

#### II. Alternatives Analysis - continued

3. Water reuse or recycle. Provide information about opportunities for water reuse or recycle at this facility. If water reuse or recycle is not a feasible alternative at this facility, please indicate the reasons why.

Water does play a key part in surface mining operations as far as misting/spraying the area to help alleviate airborne coal dust. However, the amount of water required for dust suppression is minimal compared to the discharge generated. Total watershed drainage area for discharge of dugouts, is over 370.58 acres with a combined peak discharge of over 238,000 gallons per minute. Water used for dust suppression in a day might be 12,000 gallons. Dust suppression is generally only required during dry times when the flow of the surface discharge is low or non-existent. No other water is need for recycling or reuse with this operation.

A small portion of the total discharge generated will be used for hydro-seeding when grade work is completed on this project. The cost has been estimated at over \$ 956,000 dollars to collect this water and to store the large volume generated would only add to the overall cost.

4. Alternative process or treatment options. Indicate what process or treatment options have been evaluated and provide the reasons they were not considered feasible.

Several alternatives to treating water from the project area and discharging it to streams and rivers in the area have been evaluated. These alternatives include construction of a water treatment facility, construction of physical filter barriers, chemical treatment of drainage, and construction of wetlands.

<u>Water Treatment Facility</u> Construction of a small water treatment facility (500,000 gallons per day) on the project site would cost over \$ 1.6 million dollars, plus an additional cost of approximately \$50,000 for a containment reservoir. This water treatment facility would not be able to manage the large amount of water required at this site (over 238,000 gallons per minute).

<u>Physical Filter Barriers</u> Silt fences and straw bales would not be able to handle the large discharge flow generated nor would they meet requirements of Commonwealth of Kentucky's Surface Mine Regulations as stated in 405 KAR 16:070.

<u>Chemical Treatment</u> Chemical treatment of drainage was also considered. However, the primary treatment required at this site is the removal of sediments, which is not possible using chemical treatment.

Wetland Construction Constructed wetlands have traditionally been used for biological treatment. However, the discharge generated by this operation will require sedimentation control measures, and wetlands are not effective for treating sediment. Additionally, wetlands used for water treatment would require a great deal of additional property, which is not available in this particular project area.

- II. Alternatives Analysis continued
- 5. On-site or sub-surface disposal options. Discuss the potential for on-site or subsurface disposal. If these options are not feasible, then please indicate the reasons why.

An alternative to surface discharge from the project area is sub-surface disposal. Deep mining has been conducted in vicinity of the project area. Therefore, the sub-surface disposal of drainage from the project area would present safety concerns for any present deep mining operations, and the cost is high, due to a lifting station (\$ 218,000), 24" dia. HDPE pipe to collect discharge (\$ 520,000), and possible drilling (an injection well, depending on depth, could cost up to \$ 50,000 per well to drill), required to inject the discharge underground. Injecting this discharge underground would increase the potential of an outcrop blow-out or blow-out from an old adit and would require a UIC Permit. A suitable place to inject, within a reasonable distance of this site, has not been found.

6. Evaluation of other alternatives to lowering water quality. Describe any other alternatives that were evaluated and provide the reasons why these alternatives were not feasible.

Other alternatives reviewed were:

- a) accepting a high water quality requirement, and
- b) avoiding the project.

Accepting high water quality requirements would create additional burden and cost to this project because larger ponds would have to be built. For the embankment ponds, this means more disturbances in the streams, larger volumes of water stored behind the embankments, and higher construction/removal costs (approximately \$15,000 per pond).

Avoiding this project would mean that the advantages of economic development in the surrounding small communities such as Sidney, KY, in Pike county would not be realized. At a minimum, 50 local jobs would be lost, the tax base would diminish (\$ 80,834 in severance taxes would not be collected), and local businesses would not prosper to the same extent.

#### III. Socio-economic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

This area in Pike County has been previously mined and logged, with the discharge from those areas presently flowing untreated into area streams. Sidney Coal Company, Inc. proposes to build ten dugout ponds and one embankment pond to treat this watershed discharge. The area will also be re-graded to prevent erosion from the previous logging activities.

2. Describe this facility's effect on the employment of the area.

This mining operation would provide employment for an estimated (50) employees. These mining positions will prove to be higher paying jobs than other industries in Pike county, specifically near small communities such as Sidney, KY. The average weekly wage in the mining industry for Pike county is \$887.25. This is compared to the average weekly wage for all other industries in Pike County of \$502.50 (2003 U. S. Bureau of Labor Statistics).

3. Describe how this facility will increase or avoid the decrease of area employment.

The economy in this portion of Pike County is dependent on the Mining Industry. Therefore, this operation will provide for the continuation of higher wage permanent employment in the area work force. This also positively affects the support industries that will help to supply the material and equipment needed for mining, as well as other services such as engineering, and also the training that will be needed for employees to work in the mines. It is likely that a new mine will lead to an increase in employment, but at the very least, the mine will avoid a decrease in local employment figures.

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

The surface mine facility will provide jobs in Pike County, in small communities such as Sidney, KY, and help prevent the loss of jobs when an existing area facility closes or moves to another area. Recovery of the coal, located along Bevins Branch, will produce over 738,200 tons of coal. This will generate over \$538,894 in severance taxes, at approximately \$0.73 cents/ton, of which Pike county will receive a total of over \$80,834 (15 percent). Additional revenue will be given to local businesses generated through increased employment to handle support services catering to the mining operation directly and to the needs of the employees on a daily basis. Local income taxes, property taxes, and sales taxes, will also add to revenue brought in by the mining facility.

These monies will be returned to the community providing funds to help establish alternative industries for additional local employment opportunities, as well as provide for public safety, environmental protection, public transportation, vocational training, local health / recreational / educational facilities, social services, industrial/economic development, workforce training, and the secondary wood industry. Property values increase when land is active. Therefore, when mining is being conducted, the land has an increased value requiring increased property taxes to be paid in to the city operating fund.

5. Describe any other economic of social benefits to the community.		
This facility will not only provide mining jobs but will also provide jobs that help support the mining industry. Equipment sales and repair, mining and engineering consultants, along with fuel and transportation providers, will be needed as a result of the mine. The creation of more jobs in the surrounding communities such as Sidney, KY in Pike county, will spur community development, thus creating even more employment opportunites in the local area.  The increased payments of property taxes will benefit schools so that they have funding to purchase better equipment, improve their facilities, and increased salaries for the teachers. In addition, the increased tax payments will provide additional money for government services to better serve the local area citizens.	l	
III. Socio-economic Demonstration – continued		
III. Socio-economic Demonstration – continued		
6 Will this project he libely to the control of the	Yes	No
6. Will this project be likely to change median household income in the county?		Ш
7. Will this project likely change the market value of taxable property in the county?		
8. Will this project increase or decrease revenues in the county?		
9. Will any public buildings be affected by this system?		$\boxtimes$
10. How many households will be economically or socially impacted by this project?  It is estimated that (50) workers will be employed by the project. Thus, (50) households will be directly affected by the operation. These households will, in turn, affect at least 1.5 times additional households (75), of local business owners and their employees by purchasing goods and services in the area.	e	
11. How will those households (if any) be <i>economically</i> or <i>socially</i> impacted?  (For example, through creation of jobs, educational opportunities, or other social or economic benefits)		
The households of the estimated (50) facility employees will be positively impacted by the higher that average income that these mining jobs will provide. The average weekly wage for the mining industrial in Pike county is \$887.25. The average weekly wage for all other industries in Pike county is \$502.50. Additionally, many other households will be impacted by the increased business for local retailers and their employees in Pike county, engineering services, and fuel/transportation providers, particularly around small communities such as Sidney, KY. The employees of these support businesses will be positively impacted with a more secure place of employment due to the increased revenue given by the mining industry.	ry ·	
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		<u>Yes</u>	<u>No</u>
12	. Does this project replace any other methods of sewage treatment to existing facilities? If so, describe how.		$\boxtimes$
	The proposed project is a surface mining operation. There are no existing sewage waste water discharges that this project could replace.		
		Yes	No
13	. Does this project treat any existing sources of pollution more effectively? If so, describe how.	×	
	The discharge proposed in this application amendment will be in areas that have been mined and logged before. Presently, there are approximately 370.58 acres of uncontrolled runoff from this area. Any runoff from these drainage areas into area streams will now be treated by the proposed sediment control structures.		
III	. Socio-Economic Demonstration - continued		
111	. Socio-Economic Demonstration - continued		
		<u>Yes</u>	<u>No</u>
14.	Does this project eliminate any other sources of discharge or pollutants? If so, describe how.		
	The Bevins Branch watershed has been previously mined and logged. With the re-mining proposed in this project, runoff pollution will be eliminated through reclamation instead of the current uncontrolle runoff into area streams.	d	
15.	How will the increase in production levels positively affect the socio-economic condition of the area?		
	The increase in productivity levels is not only providing jobs for this operation at a higher than average weekly mining wage of \$887.25 in Pike county, versus all other industry wages of \$502.50 in Pike county, but will create additional revenue for the existing businesses in and around Pike county. The additional revenue of the local businesses and the severance tax dollars for Pike county generated by this project (over \$80,834 dollars), will provide the local government increased benefits in public safety (law enforcement, fire protection, ambulance services) and also aid in the industrial and economic development in the surrounding communities such as Sidney, KY in Pike county.		
16.	How will the increase in operational efficiency positively affect the socio-economic condition of the area?		-
	The proposed method of coal extraction is the most efficient and economical method for this particular site. This method allows for maximum removal of coal reserves, increasing the amount of tax dollars that contribute to the state and local economy, and providing more jobs for people in the surrounding community. The facility will continue to provide employment to an estimated 50 workers during the life of the operation. The project will also help to provide as many as 75 additional jobs in other sectors of the economy, such as engineering, fuel, and transportation. Therefore, the proposed mining operations positively affect the local economy more than other industries.		

IV Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Title:	Randy L. Tackett, Agent	Telephone No.:	(606) 353- 5500
Signature:	Landy L. Tacket	Date:	9-06-07

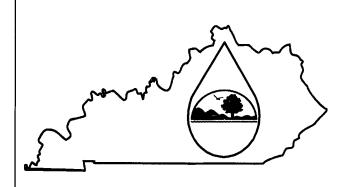
### KPDES COAL GENERAL PERMIT INTERNAL REVIEW ROUTING SHEET

Permit Name: Sidney Coal Company Inc	No.: West 1622.7
	$\frac{85262}{: 898-0798}$
Permit Writer: Erin Wright	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Permit Action: Review for Coverage Description of Operation: Underground	<u>d: 5/14/2007</u> Date
Special Handling:	missing
Priority: Top Priority	
	11-27-07 EUW
To: Brin Wright	γ ( α γ - γ ε ν ν -
☐ APPROVE ☐ DISAPPROVE	0111111 20 2000
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To: Larry Sowder	
☐ APPROVE ☐ DISAPPROVE	
Initials: Date:	
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To: Ann Workman - Public Notice Coordinat	Comments:
☐ APPROVE ☐ DISAPPROVE	Estimated Public Notice Date:
Initials: Date:	<u></u>

Final Destination: Division of Water Files (NONDISCLOSABLE)

## **KPDES FORM C**

AI: 85262



Name of Facility: Fraley Branch Surface Mine

## KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

#### PERMIT APPLICATION

A complete application consists of this form and Form 1. For additional information, contact KPDES Branch, (502) 564-3410.

County: Pike AGENCY

I. OUTFALL LC	JCATION				USE		
For each outfall lis	st the latitude a	and longitude of	of its location	to the nearest	15 seconds ar	nd the name o	of the receiving water.
Outfall No.		LATITUDE			LONGITUDE	3	
(list)	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	RECEIVING WATER (name)
See attachment							

#### II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO.	OPERATION(S) CONTRI	BUTING FLOW	TREATM	ENT
(list)	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
See attachment				
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<u> </u>				
			· · · · · · · · · · · · · · · · · · ·	

II. FLOWS	, SOURCES OF PO	DLLUTION, A	AND TRE	ATMENT 1	<b>TECHNOLOGIE</b>	S (Continued	)	
C Except for	storm water runoff,	leaks or spills	are any of	f the dischar	as described in It	oma II A or D	intormittant or a	200ma10
C. LACOPI IOI	storm water runori,	icaks, or spins	, are any or	i ine dischai	ges described in it	ellis II-A of B	intermittent or se	easonai?
	Yes (Complete t	he following ta	able.)		No (Go	to Section III.)	•	
OUTFALL	OPERATIONS	FREQU	FNCV	I		FLOW		
NUMBER	CONTRIBUTING	Days	Months	F	low Rate		l volume	Duration
	FLOW	Per Week	Per Year	(	in mgd)	(specify	with units)	(in days)
(list)	(list)	(specify	(specify	Long-Tern		Long-Term	Maximum	
		average)	average)	Average	Daily	Average	Daily	
ı								
		I	l	<u> </u>				
III. MAXIM	IUM PRODUCTIO	N						
A Door on a	effluent eurideline line			DA d C-		51 <b>33</b> 7. A	. 1	
A. Does an e	effluent guideline lim	iliation promui	gated by E	PA under Se	ection 304 of the C	lean Water A	ct apply to your f	acility?
	Yes (Complete I	tem III-B) List	effluent gi	uideline cate	gory:			
N71	N (0 + 0 + 1	** **						
$\boxtimes$	No (Go to Section	on IV)						
B. Are the li	mitations in the appl	icable effluent	guideline e	expressed in	terms of production	on (or other me	easures of operat	ion)?
				_	-	`	•	,
	Yes (Complete I	tem III-C)	$\boxtimes$	No (Go t	o Section IV)			
C. If you an	swered "Yes" to It	em III-B, list	the quanti	ty which re	presents the actua	ıl measuremei	nt of your maxi	num level of
productio	n, expressed in the te	erms and units	used in the	applicable	effluent guideline,	and indicate the	ne affected outfa	lls.
		MAVIMIN	T ON A NIT	ITV			A 65 4 1 6	
Quantity Per	Day Units o	MAXIMUM f Measure			roduct, Material,	Ftc	Affected C	
Quantity 1 01	Day Cines 0	i mousure			(specify)	Ett.	(list outlan i	iumbers)
			1					
IV. IMPRO								
A. Are you	now required by a	ny federal, sta	ate or loca	al authority	to meet any imp	lementation s	chedule for the	construction,
upgraumg discharge	g, or operation of versions of versions of versions of versions of versions.	vasiewaier equ inplication? Tl	upment or ois include	r practices (	or any other envi	ronmental pro	ograms which madministrative or	ay affect the
orders, en	forcement complian	ce schedule let	ters, stipula	ations, court	orders and grant of	or loan conditions,	ons.	emoreement
	V (C1-4-4)	l C. 11	11.	K71	N. (C. ) II. III.	· 5\		
	Yes (Complete t	ne tollowing ta	idie)	$\boxtimes$	No (Go to Item IV	-B)		
	ION OF CONDITION							
AGREE	EMENT, ETC.		TED OUTFA Source of Di		BRIEF DESCRIPTI	ON OF PROJEC	T FINAL CON Required	APLIANCE DATE
		1100	Source of Di	ovnai St			Kequirea	Projected

**B.** OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

A,	B, & C:	space provided	s before proceeding – Co l. s V-A, V-B, and V-C are			- Annotate the outfall number in the				
D.	D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.									
		JTANT	SOURCE		POLLUTANT	SOURCE				
No	ne									
VI.	VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS									
A.	A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?  Yes (List all such pollutants below)  No (Go to Item VI-B)									
B.	B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?									
		Yes (Complete	Item VI-C)	No (Go to	Item VII)					
C.	expected le	vered "Yes" to Ite vels of such pollu heets if you need	itants which you anticipa	and describe in ate will be disch	detail to the best of your a arged from each outfall o	ability at this time the sources and over the next 5 years. Continue on				

V. INTAKE AND EFFLUENT CHARACTERISTICS

Yes (Identify the test(s) and describe their purposes below)	$\boxtimes$	No (Go to Section VIII)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
Appalachian States Analytical,	P.O. Box 520	(606) 437-5616	Total Suspended Solids
LLC	Shelbiana, KY 41562	(111)	Antimony, Total
			Chromium, Total
			Nickel, Total
			Zinc, Total
			Sulfate
			рН
			Arsenic, , Total
			Copper, Total
			Selenium, Total
			Cyanide, Total
			Iron, Total
			Beryllium, Total
			Lead, Total
			Silver, Total
			Phenols, Total
			Hardness
			Manganese, Total
			Cadmium, Total
			Mercury, Total
			Thallium, Total

# ATTACHMENT - SECTION I OUTFALL LOCATIONS

Outfall No.	LATITUDE			LONGITUDE			
(list)	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	RECEIVING WATER (name)
005	37	40	37	82	22	44	Big Creek
006	37	40	10	82	22	37	Big Creek
007	37	40	23	82	22	17	Fraley Branch
008	37	40	15	82	22	18	Fraley Branch
009	37	40	17	82	22	25	Fraley Branch

# ATTACHMENT - SECTION II FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

Outfall No.		NTRIBUTING FLOW	TREATMENT		
(list)	Operations (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1	
005	Surface Runoff	8.75 cfs (peak)	Sedimentation	1 <b>-</b> U	
			Discharge to surface water	4-A	
006	Surface Runoff	21.73 cfs (peak)	Sedimentation	1-U	
			Discharge to surface water	4-A	
007	Surface Runoff	47.18 cfs (peak)	Sedimentation	1-U	
			Discharge to surface water	4-A	
008	Surface Runoff	10.84 cfs (peak)	Sedimentation	1-U	
			Discharge to surface water	4-A	
009	Surface Runoff	12.77 cfs (peak)	Sedimentation 1-U		
			Discharge to surface water	4-A	

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

V. INTAKE AND EFFILIENT CHARACTERISTICS (Continued from peace 3 of Ecom Co	EFFILIENT CH	LSIGALUV QV	TICE (Cantinued fo	om nama 2 of Ea								
Part A – You must	provide the result	s of at least one	analysis for every p	ollutant in this tab	Part A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See	ble for each outfa	II. See instructions	instructions for additional details		OUTFALL NO.		
				2. EFFLUENT				3. UNITS (specify if blank)	TS blank)	4	4. INTAKE	
1. POLLUTANT	a. Maximum Daily Value	Daily Value	b. Maximum 30-Day Value (if available)	0-Day Value lable)	c. Long-Term Avg. Value (if available)	Avg. Value able)	No. of	a. Concentration	Mass	a. Long-Term Avg. Value	vo. Value	7
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1) Concentration	(2) Mass	No of
a. Biochemical Oxygen Demand (BOD)						:						
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)	22						-	mg/l				
e. Ammonia (as N)									:			
f. Flow (in units of MGD)	VALUE No Flow	UE low	VALUE	JE	VALUE	Œ	-	MGD		VALÜE	IE .	
g. Temperature (winter)	VALUE	UE	VALUE	JE	VALUE	Œ		°င		VALUE	Œ	
h. Temperature (summer)	VALUE	UE	VALUE	JE	VALUE	Œ		°c		VALUE	E	
i. pH	MINIMUM 7.02	7.02	MINIMUM	MAXIMUM				STANDARD UNITS	UNITS			

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and

POLITIANT	MAR	2. MARK "X"				3.				4.			6.	
AND CAS NO.	'n	Ď.	a. Maximum Daily Value	ily Value	b. Maximum 30-Day Value (if available)	0-Day lable)	c. Long-Term Avg. Value (if available)	n Avg.	No of	<b>1</b>	7	a. Long-Term Avg	g-Term Avg	, p
(if available)	Believed Present	Believed Absent	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses	Concentration	Mass	(1)	(2)	Analyses
a. Bromide		<										() m + + 1 m m m m m	17 EM COU	
b. Bromine		^^												
Total														
Residual		X												
c. Chloride		×							,					
d. Chlorine,														
Residual		×												
e. Color		×												
f. Fecal Coliform		×			ī									
g. Fluoride (16984-48-8)		×												
h. Hardness (as CaCO <sub>3</sub> )	×		414.77							mø/l				
i. Nitrate – Nitrite (as N)		×								c				
<ul><li>j. Nitrogen, Total</li></ul>														
Organic (as N)		×												
k. Oil and Grease		×												
l. Phosphorous (as P), Total 7723-14-0		×												
m. Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		×												
(3) Radium Total		×												
(4) Radium, 226, Total		X												

POLLUTANT And CAS NO.  (if available)	8e .	2. MARK "X" b. eved Believed	a. Maximum Daily Value (1) (2)	y Value	3. EFFLUE b. Maximum 30-Day Value (if available) (1) (2)	3. EFFLUENT m 30-Day vailable) (2)	c. Long-Term Avg. Value (if available) (1) (2)	Avg. lable)	d. No. of Analyses	4. UNITS a. Concentration		Mass	Long-Te	INTAKI a. Long-Term Avg. (1)
n. Sulfate (as SO <sub>4</sub> ) (14808-79-8)	X	Absent	Concentration 399	Mass	Concentration	Mass	Concentration	Mass	-	mg/l	g/1	g/1	Conc	
o. Sulfide (as S)		×												
p. Sulfite		ļ												+
(as SO <sub>4</sub> ) (14286-46-3)		×		ļ										
q. Surfactants		×												
r. Aluminum, Total (7429-90)		X												
s. Barium, Total (7440-39-3)		×												
t. Boron, Total (7440-42-8)		X												
u. Cobalt, Total (7440-48-4)		×												
v. Iron, Total (7439-89-6)	×		0.09				-		_		mg/l	mg/l	mg/l	mg/l
w. Magnesium Total (7439-96-4)		×									,		c	
x. Molybdenum Total (7439-98-7)		×												
y. Manganese, Total (7439-96-6)	×		<0.01		_						mø/l	mp/l	mo/l	mo/l
z. Tin, Total (7440-31-5)		×												
aa. Litanium, Total		×				- "								

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the Testing Required column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Mark "X: in the Believed Absent column for each pollutant you believe to be absent. If you mark either the Testing Required or Believed Present columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

one lable (all seve	n pages) for e	ach outrall. S	ee instruction	one table (all seven pages) for each outfall. See instructions for additional details and requirements.	ails and req									
ŗ		ARK "X"				E	3. EFFLUENT				ENIZ.		5. INTAKE (ontional)	ntional
POLLUTANT And CAS NO.	æ	Þ	Ь	<b>,</b>		h Maximum 30-Day		c I ong-Term	Ava	2-		,	a.	ь.
	Testing	Believed	Believed	Maximum Daily Value	Value	Value (if available)	able)	Value (if available)	able)	No. of	Concentration	Mass	Conf. To m U.S. A wine	
(II AVAIIADIE)	Kequired	Present	Absent	(1) Concentration	Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	Analyses			(1) Concentration	(2) Mass
METALS, CYANIDE AND TOTAL PHENOLS	VIDE AND T	OTAL PHE	NOLS										ŀ	
1M. Antimony	<													
(7440-36-0)	>			<0.002						_	mo/l			
2M. Arsenic,														
Total	×													
(1-00-0-2)				100.00						_	mg/l			
Total	×												_	
(7440-41-7)	:			<0.005						_	mg/l			
4M. Cadmium											q			
Total	×			000							·		***	
5M. Chromium				0.000						-	1/8111			
Total	×													
(7440-43-9)				<0.02							mg/l			
6M. Copper Total	×													
(7550-50-8)				<0.01						<b></b>	mg/l			
7M. Lead											9.			
Total	×													
(7439-92-1)				<0.05						-	mg/l			<del></del>
8M. Mercury Total	×													
(7439-97-6)				<0.0002					_	-	mg/l			
9M. Nickel,	×				_									
(7440-02-0)				0.009							mg/l			
10M. Selenium,	:										,			
Total (7782-49-2)	×			0.009						-	mc/i			
11M. Silver,											à.			
Total	×													
(7440-28-0)				<0.01						_	mg/l			

Analyses   Concentration   Analyses   Concentration   Analyses	rart C - Conunued	ca													
Action No.   Testing   Relieved   Relieved	1.		2. MARK "X"				3 EFFLI	UENT.				4. UNITS		5. INTAKE (optional)	nai)
	And CAS NO.	<b>*</b>	<b>.</b>	ਲ਼	je.		b. Maximum 30-	Dav	c. Long-Term	Ave.	d.	<b>P</b>	<b>.</b>	a. Long-Term Avo Value	7
TAIS, CVANUDE AND TOTAL PHENOLS (Continued)	(if and late)	Testing	Believed	Believed	Maximum Daily	Value	Value (if availal	ble)	Value (if avails	ble)	No. of	Concentration	Mass	0	No. of
TALS. CVANUDE AND TOTAL PHENOLS (Confinerd)   Thalium,   X	(II AVAIIADIE)	Required	Present	Absent	(1) Concentration	Mass (2)		Mass	(1) Concentration	M <sub>2</sub> (2)	Analyses			(1) (2)	
Trallium,   Tral	METALS, CYAN	IDE AND TO	OTAL PHE	NOLS (Cont	inued)									ŀ	
Citative Code	12M. Thallium, Total	×			>						,	:			
Total   X	13M. Zinc,				0.1						-	mg/I			
Total	Total (7440-66-6)	×	48.0	-	<0.005						_	mg/l			
C97-12-5)   X   C90.04	14M. Cyanide, Total	×										¢			
Total   X	(57-12-5)				<0.01						1	mg/l			
NIN   No.   Nin    Total	×			2				-114		·	ı				
7,8 Tetra- prodibenzo, Dioxin X 1784-01-6)  WAS FRACTION - VOLATILE COMPOUNDS  Acrolein (107-02-8)  X  VIolatrile X  X  VIolatrile X  Senzene 43-2)  Benzene 25-2)  Carbon 225-2)  Carbon 23-5)  CChloro- benzene k-90-7)  Prodibro- nethane 1-48-1)  X  X  X  X  X  X  X  X  X  X  X  X  X	DIOXIN				0.01						-	mg/I			
P. Dioxin   X   X   X   X   X   X   X   X   X	2,3,7,8 Tetra-				DESCRIBE RESU	LTS:									
IV. Acrolein (107-02-8)	P, Dioxin (1784-01-6)	-		×											
Acrolein (107-02-8)  Jonitrile (7-13-1)  Benzene 43-2)  Bromoform 25-2)  Carbon achloride 23-5)  Chloro- benzene 4-90-7)  prodibro- nethane 1-48-1)	GC/MS FRACTIO	ON - VOLAT	TILE COMP	OUNDS											
ylonitrile 1/7-13-1) Benzene 43-2) Bromoform 2-5-2) Carbon Carbon Chloro- benzene 4-90-7) prodibro- nethane 1-48-1)	1V. Acrolein (107-02-8)			×	· · · · · · · · · · · · · · · · · · ·	<del></del> .									
yionitrile 77-13-1) Benzene 43-2) Bromoform 25-2) Carbon Carbon archloride 23-5) Chloro- benzene 8-90-7) Srodibro- nethane 1-48-1)	· 1									_			1		
Benzene 43-2) Bromoform -25-2) Carbon Carbon Chloride 23-5) Chloro- benzene 4-90-7)  prodibro- nethane 1-48-1)	Acrylonitrile (107-13-1)			×		_									
Bromoform -25-2) Carbon achloride 23-5) Chloro- benzene 4-90-7)	3V. Benzene (71-43-2)			×	,										
Carbon achloride 23-5) Chloro- benzene \$-90-7) prodibro- nethane 1-48-1)	5V. Bromoform (75-25-2)			×											
Chloro- benzene \$-90-7)  prodibro- nethane 1-48-1)	6V. Carbon Tetrachloride (56-23-5)			×											
orodibro- nethane 1-48-1)	7V. Chloro- benzene (108-90-7)		_	×											
	8V. Chlorodibro-														
	momethane (124-48-1)			×											

December   Present   Abert   Concentration   Present   Abert   Concentration   Mass   Concentration	ı.		2. MARK "X"				HAG	3. EFFLUENT	, and the second			4. UNITS		INTAK	5. INTAKE (optional)	=
Mark   Required   Present   Absent   Concentration   Mass   Concentration   Mass   Concentration   Mass   Concentration   Mass   Concentration   Mass   Concentration   Conc	And CAS NO.	a. Testing	a. Believed	b. Believed	a. Maximum Daily	Value	b. Maximum 3 Value (if avail	0-Day	c. Long-Term Value (if avail	Avg.	N d.	a.	Y 5	a. Long-Term Avg	Value	No. of
Chloro-   Chlo	(if available)	Required	Present	Absent	(1) Concentration	(2) Mass	(1)	M (2)	(1)	(2) Mass	Analyses		172830	(1)	(2)	Analyses
ethane 3) -Chloro- myl Ether s-8)  form form  form 3 3 3 1- 1- 0 cethane -cethane -cothane -c	9V.						CORCURATION	TATOR	Concentiation	CCDIAL		- Commence of the Spirit Spiri		Сонсениянон	NIMSS	
Chloro- nyl Ether 5-8) 5-8) form 3. ichloro- nethane 8. roethane 7-2 2- 2- 2 roethane 6. 1.2-Di- ropane 5) 3 opro- opr	Chloroethane 74-00-3)			×		-										
ryl Ether 5-8) 5-8)  form form form  schloro- nethane 8) 1- roethane 2 oethane 4 11,2-Di- ropane 5) 3- opro- opro-  -4) 4) 4 1,2-Di- forpane 5) 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	IOV. 2-Chloro-															
form 3) ichloro- nethane 8) (-1 coethane 3) 2 coethane 5-2) 1- 1,2-Di- ropane 6) 3- 3- 3- 3- 4) 6 ethyl- hyl- ethyl ethyl ethyl ethyl ethyl	ethylvinyl Ether (110-75-8)			×					-							
form ichloro- methane nethane 8.8 1.1- rocethane 2.2- rothane 1.1- 1.1- 1.2-Di- ropane 5.3 3.3- 3 3 6.6) hyl- hyl- cethyl	IIV.															
nichloro- methane  8) 1- 2- coethane 5-2) 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1-	Chloroform 67-66-3)			×								•	-			
nethane 8) 1.1- (roethane 2) 2- (roethane 4) 1.2-Di- (ropane 5) 3- 3- opto- 4) 4) 4) 4) 6	2V. Dichloro-															
11- roethane 2- 2- rethylene 4 1,2-Di- ropane 5) 3- ropane 5) 3- ropane 6) hyl- hyl- ethyl	75-71-8)			×												
oethane 3) 3) 7) coethane 6-2) 1- 1- 1,2-Di- ropane 5) 3- opro- opro- 4) 4) 4) 6	4V. 1,1-															
2- coethane 5-2) 1- 1- 1,2-Di: ropane 5) 3- 3- opro- hyl- hyl- ethyl ethyl	75-34-3)			×												
octhane 5-2) 1.2-Di- ropane 5) 3- opro- hyl- hyl- cethyl	ISV. 1,2-															
1- ethylene 4) 1,2-Di- ropane 5) 36) hyl- hyl- ethyl ethyl	107-06-2)			×												
ethylene 4) 4, 1,2-Di- ropane 5) 5, 0 opro- hyl- chyl- chyl ethyl	6V. 1,1-															
1,2-Di- 1,2-Di- 170pane 5) 3- 3- 00pro- 04) 14) 14) 14)	75-35-4)			×					_,			7944				
ropane 5) 3																
3- opro- opro- /-6) /-4) ethyl ethyl	nloropropane 78-87-5)			×												
opro- i-6) hyl thyl- cthyl	8V. 1,3-														i i	
-6) hyl- -4) ethyl	ichloropro-		_	×												
yl- (t) (hyl	/lene 52-75-6)												•			
hyl	9V. Ethyl-															
hyl	onzene		_	×						-		_	_			
	)V. Methyl															
	romide			×						-					-11	

Part C - Continued	ä														
1.		2. MARK "X"		v indigental desired		ЕГР	3. EFFLUENT				4. UNITS		INTAK	5. INTAKE (optional)	
And CAS NO.	'n	'n	<b>.</b>	je je		b. Maximum 3	0-Dav	c. Long-Term	Avg.	<b>.</b>	<b>je</b>	Þ.	a. Long-Term Avo. Value	z. Valme	N p.
(familialia)	Testing	Believed	Believed	Maximum Daily Value	Value	Value (if available)	able)	Value (if available)	able)	No. of	Concentration	Mass	d		Analyses
(if available)	Required	Present	Absent	(1) Concentration	Mass	(1) Concentration	(2) Mass	(1) Concentration	Mass	Analyses			(1)	(2)	•
21V. Methyl			<											1110000	
(74-87-3)			>												
22V. Methylene															
Chloride			×												
(75-00-2)															
23 V. 1,1,2,2-			(												
retracnioro-			×												
(79-34-5)															
24V.															
renacinoro-			>												
(127-18-4)												-,			
YSV Toluono			4												
(108-88-3)			;												
26V. 1,2-Trans-															
Dichloro-			×												
ethylene															
27V 111-Tri-															
chloroethane			×												
(71-55-6)											-				
28V. 1,1,2-Tri-			<			-									
(79-00-5)			;							-					
29V. Trichloro-															
ethylene (79-01-6)			×			_									
30V. Vinyl															
Chloride			×		-11										
(/S-01-4)															_

1.	And CAS NO.	(if available)	GC/MS FRACTION – ACID COMPOUNDS	phenol (95-57-8)	2A. 2,4- Dichlor-	Orophenol (120-83-2)	3A.	2,4-Dimeth-	(105-67-9)	4A. 4,6-Dinitro-	0-cresol (534-52-1)	5A. 2,4-Dinitro-	(51-28-5)	6A. 2-Nitro-	phenol (88-75-5)	7A. 4-Nitro-	(100-02-7)	8A. P-chloro-m-	(50 50 7)	(7-70-40)	9A.	9A. Pentachloro- phenol	9A. Pentachlorophenol (87-88-5)	9A. Pentachloro- phenol (87-88-5)  10A. Phenol (108-05-2)	(39-30-7) 9A. Pentachlorophenol (87-88-5) 10A. Phenol (108-05-2) 11A. 2,4,6-Tri- chlorophenol	9A. Pentachloro- phenol (87-88-5)  10A. Phenol (108-05-2) 11A. 2,4,6-Tri- chlorophenol (88-06-2)	O.Y-204-7)   O.Y
	a. Testing	Required	ION - ACID							-																	ON - BASE/
2. MARK "X"	a. Believed	Present	COMPOUN																								NEUTRAL
	b. Believed	Absent	DS	×	<	;		×			×	×	^	<b>,</b>	×	4	>		*		×		×	X	,		
	a. Maximum Daily Value	(1) Concentration													-												
	/ Value																										
EFF	b. Maximum 30-Day Value (if available)	(1) Concentration																									
3. EFFLUENT	0-Day able)	(2) Mass														_							mt.				
	c. Long-Term Avg. Value (if available)	(1) Concentration																									
	Avg.	(2) Mass																									
	No. of	Analyses																									
4. UNITS	a. Concentration																										
	b.																										
INTAK	a. Long-Term Avg Value	(1) Concentration																									
5. INTAKE (optional)	g Value	(2) Mass																									
<u>.</u>	No. of												,		,								,,_				

Benzidine (92-87-5)	Part C - Continued  1.	a. Testing Required	2. MARK "X"  a. Believed Present	b. Believed Absent  COMPOUN  X	Maximum Daily Value (1) (2) Concentration Mass  VDS (Continued)	Value (2) Mass	b. Maximum 30-Day Value (if available) (1) (2) Concentration Mass	3. EFFLUENT um 30-Day available) on (2) Mass	c. Long-Term Avg. Value (if available) (1) Concentration Mas	d. No. of Analyses	4. UNITS a. Concentration	a.  Concentration Mass	b. Long-T Mass (1)	Mass
tline -5) -7) nnzo(a)- nnzo(a)8) -8 -8 -8	phtylene (208-96-8) 3B. Anthracene (120-12-7)			× ×										
nzo(a)- ccene -3) nzo(a)- nzo(a)- nzo(a)-  -8  8  -Benzo- tithene 9-2) nzo(ghl) ne 4-2) Bis(2- Bis(2- py)- pyl)- is is is if- itc	4B. Benzidine (92-87-5)			×										
nzo(a)8) -Benzo- t-Benzo- t	5B. Benzo(a)- anthracene (56-55-3)			×										
-Benzo-   tithene   9-2)   9-2)   mzo(ghl)   nazo(k)-   nazo(k)-	6B. Benzo(a)- pyrene (50-32-8)			×										
anzo(ghl) anzo(k)- an	7B. 3,4-Benzo- fluoranthene (205-99-2)			x										
nzo(k)- ithene 8-9)  Bis(2- yy- te 1-1) is is is is is is is it- ite 1-7)	8B. Benzo(ghl) perylene (191-24-2)			×										
Bis(2- y)- vie le lis is is r- pyl)- pyl)- lis	9B. Benzo(k)- fluoranthene (207-08-9)			×										
	<u>T</u> でダ			×										
s -7)	11B. Bis (2-chlor- oisopropyl)- Ether			×										
	12B. Bis (2-ethyl- hexyl)- phthalate (117-81-7)			×										

POLITION   And CAS No.   Total   About   Abo	Part C - Continued	ed													
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RRACTION - BASE/REUTRAL CONFOUNDS (Continued)	(if available)	Required	Present	Absent		(1) Concentration		(1)		Analyses	Солсениянов	SSRIAI	(1)	<b>(</b> 2)	Analyses
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nne 3) 1loro- 1loro- 1	15B. 2-Chloro-														
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anzo- nzo- yl	16B. 4-Chloro-														
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sene sene	(7005-72-3)														
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[3] [6]	18B. Dibenzo-			4											
	Anthracene			>											
N	(53-70-3)														
91	19B. 1,2-						_								
<b>1 1 1 1 1 1 1 1 1 1</b>	Dichloro-			×	-12							••			
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	23B. Diethyl			<											
	(84-66-2)			>						-					

Part C - Continued	ď							Annual man and a second control of the second secon							
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24B. Dimetnyl Phthalate (131-11-3)			×												
25B. Di-N-															
butyl Phthalate (84-74-2)			×												
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(121-14-2)															
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28B. Di-n-octyl			<												
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30B.			<												
(208-44-0)			;												
31B. Fluorene (86-73-7)			×												
32B. Hexachloro-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	×					:							
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Part C - Continued	ed													
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33B. Hexachio-			×											
(67-72-1)			,				-							
36B. Indneo-			1											
(1,2,3-00)-			×							_				
(193-39-5)									-					
37B.														
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795														
Napthalene			×											
(91-20-3)		-												
39B.										i				
Nitro-			×											
(98-95-3)														
40B. N-Nitroso-														
dimethyl-			×											
(62-75-9)		<del>-</del>												
41B.														
N-nitrosodi-n-			×										7.7	
propylamine (621-64-7)						*								
42B. N-nitro-														
sodiphenyl-			×											
amine (86-30-6)								14						
43B. Phenan-														
threne (85-01-8)			×											
44B. Pyrene			×											
45R 1 2 4 Tri-														
chloro-			×							_				
benzene														_
(120-02-1)		L	_		  -		L		L	_		L		_

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<b>III</b>	And CAS NO.	(if available)	GC/MS FRACTION - PESTICIDES	1P. Aldrin (309-00-2)	2P. α-BHC (319-84-6)	3P. β-BHC (58-89-9)	4P. gamma-BHC (58-89-9)	5P. &-BHC (319-86-8)	6P. Chlordane (57-74-9)	7P. 4,4'-DDT (50-29-3)	8P. 4,4'-DDE (72-55-9)	9P. 4,4'-DDD (72-54-8)	10P. Dieldrin (60-57-1)	11P. α- Endosulfan (115-29-7)	12P. β- Endosulfan	29-1)	13P. Endosulfan Sulfate (1031-07-8)
		Required	ON - PESTI														_
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	!	(2) Mass								-							
2.22	b. Maximum 30-Day	(1) Concentration	<b>↓</b>							,							
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	Avg.	<b>4</b> (2)	COMMEN				<u> </u>										
	Ġ.	Analyses															
4.	<b>*</b>																
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AVENI	a. Long-Term Avg. Value	(1)	Concentration														
5.	a. erm Avg. Value	(2)	SCRIAL														
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1.	And CAS NO.	(if available)	GC/MS FRACTION - PESTICIDES	15P. Endrin Aldehyde (7421-93-4)	16P Heptachlor (76-44-8)	17P. Heptaclor	(1024-57-3)	18P. PCB-1242 (53469-21-9)	19P. PCB-1254 (11097-69-1)	20P. PCB-1221 (11104-28-2)	21P. PCB-1232 (11141-16-5)	22P. PCB-1248 (12672-29-6)	23P. PCB-1260 (11096-82-5)	24P. PCB-1016 (12674-11-2)	25P. Toxaphene
	a. Testing	Required	ON – PESTI	į											
MARK "X"	a. Believed	Present	CIDES												
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	y Value	(2) Mass													
EF	b. Maximum 30-Day Value (if available)	(1) Concentration													
3. EFFLUENT	30-Day ilable)	M (2)													
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	) Avg. lable)	M <sub>2</sub> (2)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,												
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4. UNITS	a. Concentration														
	Mass													<u>-</u> .	
INTAKE	a. Long-Term Avg Value	(1)	CORCERNATION												
5. INTAKE (optional)	Value	2	CCRTAI												
-	b. No. of Analyses	in a second													



### SUMMIT ENGINEERING, INC.

October 30, 2007

Erin Wright
Inventory & Data Management Section
KPDES Branch
Division of Water
14 Reilly Road
Frankfort, Kentucky 40601

RE: Sidney Coal Company, Inc.

KDMRE Permit No. 898-0798 Bevins Branch Surface Mine

D. Hamilton

Dear Erin:

Please find enclosed a copy of a revised Form C for the above-referenced surface mine to be located in Pike County.

If you have any questions, or require additional information, please call me at (606) 432-1447 ext. 309 or e-mail mhamilton@summit-engr.com.

Regards,

Misty D. Hamilton

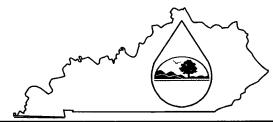
Environmental Project Manager

c: file

enclosure

## KPDES Form HQAA

Received 3-26-07 by EVW



# **Kentucky Pollutant Discharge Elimination System (KPDES)**

High Quality water Alternative Analysis

The Anti-degradation Implementation Procedures outlined in 401 KAR 5:030, Section 1(3)(b)5, allows an applicant who does not accept the effluent limitations required by sub-paragraphs 2 and 3 of 5:030, Section 1(2)(b), to demonstrate to the satisfaction of the Environmental and Public Protection Cabinet that no technologically or economically feasible alternatives exist, and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located. The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility. This demonstration shall also include this completed form and copies of any engineering reports, economic feasibility studies, or other supporting documentation

Facility Name:	Sidney Coal Company, Inc. KDMRE Permit ID. 898-0798	KPDES NO.:	
Address:	P. O. Box 299	County:	Pike
City, State, Zip Code:	Sidney, KY 41564	Receiving Water Name:	Bevins Branch of Big Creek

II. Alternatives Analysis - For each alternative below, discuss what options were considered and state why these options were not considered feasible.

1. Discharge to other treatment facilities. Indicate which treatment works have been considered and provide the reasons why discharge to these works is not feasible.

Alternative treatment works have been investigated. It would cost over \$ 956,000 (7,775 feet of 24" dia. HDPE pipe at \$ 67/ft. and two lifting stations at \$ 218,000 ea. ) to collect and gather the discharge, from the ten sediment dugouts and one pond, in this proposal. An in-ground collection reservoir would also be required or an above ground tank.

It would also take another \$ 13.1 million to run 24" dia. min. HDPE pipe for 37 miles at \$ 67/ft, plus, over \$ 8.1 million for (37) lifting stations @ one lift station (500,000 gpd) each mile for \$ 218,000 / station, to carry the water discharge to the nearest downstream municipal water treatment plant which is the Martin County Water Treatment Facility, approximately 37 miles away. The Martin County treatment plant would then require a sedimentation basin to remove the silt before even allowing the water to enter their plant. These high basic costs alone prohibit this possible alternative.

2. Use of other discharge locations. Indicate what other discharge locations have been evaluated, and the reasons why these locations are not feasible.

As an alternative to discharging in Bevins Branch and Big Creek, Sidney Coal Company examined diverting drainage and runoff into unnamed tributaries of Big Creek. These are the nearest adjacent drains to the project area. However, any discharge into these alternative drains would still, ultimately, discharge into Big Creek. These alternative streams would not only have their normal flows, but would also receive the diverted flow from Bevins Branch and Big Creek. Also, gathering and collecting the discharge from the ten proposed dugouts and one embankment pond is already cost prohibitive as it would cost over \$ 956,000 dollars to do this work, as stated above.

L) Is this how much it would cost

o run pipe to the

Revised November 16, 2004

- II. Alternatives Analysis continued
- 3. Water reuse or recycle. Provide information about opportunities for water reuse or recycle at this facility. If water reuse or recycle is not a feasible alternative at this facility, please indicate the reasons why.

Water does play a key part in surface mining operations as far as misting/spraying the area to help alleviate airborne coal dust. However, the amount of water required for dust suppression is minimal compared to the discharge generated. Total watershed drainage area for discharge of dugouts, is over (370.58) acres with a combined peak discharge of over 238,000 gallons per minute. Water used for dust suppression in a day might be 12,000 gallons. Dust suppression is generally only required during dry times when the flow of the surface discharge is low or non-existent. No other water is need for recycling or reuse with this operation.

A small portion of the total discharge generated will be used for hydro-seeding when grade work is completed on this project but the cost to collect the total volume of the discharge prohibits the use of all the water generated. The cost has been estimated at over \$ 956,000 dollars to collect this water and to store the large volume generated would only add to the overall cost.

4. Alternative process or treatment options. Indicate what process or treatment options have been evaluated and provide the reasons they were not considered feasible.

Alternatives reviewed included building an on-site water treatment plant, physical filter barriers, chemical treatment of the discharge, and wetlands construction.

Construction of a small water treatment facility (500,000 gallons per day) on the project site would be over \$ 1.6 million dollars plus the cost of a containment reservoir. The short life of the proposed operation (only five years), and the large amount of water to be treated (238,000 gallons per minute), prohibits the building of an on-site treatment plant.

The construction of silt fences and straw bales will not be able to handle the large discharge flow generated nor will they meet requirements of Commonwealth of Kentucky's Surface Mine Regulations as stated in 405 KAR 16:070.

Chemical treatment of drainage was also considered, and with chemical treatment, the ponds and dugouts are still needed to collect the sludge created by this process. Thus, chemical treatment only adds cost to the operation. — How much 7

Constructed wetlands could be used to treat water discharged from the project area but is not a feasible alternative. The primary need for treatment of the water is sedimentation, and wetlands are not effective for treating sediment. Additionally, wetlands used for water treatment would require a great deal of property, which is not available in this particular project area. Thus, use of wetlands for water treatment is not a feasible alternative.

- II. Alternatives Analysis continued
- 5. On-site or sub-surface disposal options. Discuss the potential for on-site or subsurface disposal. If these options are not feasible, then please indicate the reasons why.

An alternative to surface discharge from the project area is sub-surface disposal. Deep mining has been conducted in vicinity of the project area. Therefore, the sub-surface disposal of drainage from the project area would present safety concerns for any present deep mining operations, and this option is cost prohibitive due to a lifting station (\$ 218,000), 24" dia. HDPE pipe to collect discharge (\$ 520,000), and possible drilling (an injection well, depending on depth, could cost up to \$ 50,000 per well to drill), required to inject the discharge underground. Injecting this discharge underground would increase the potential of an outcrop blow-out or blow-out from an old adit and would require a UIC Permit. A suitable place to inject, within a reasonable distance of this site, has not been found.

6. Evaluation of other alternatives to lowering water quality. Describe any other alternatives that were evaluated and provide the reasons why these alternatives were not feasible.

Other alternatives reviewed were:

- a) accepting a high water quality requirement, and
- b) avoiding the project.

Accepting high water quality requirements would create additional burden and cost to this project, and in order to do this, larger ponds would have to be built. For the embankment ponds, this means more disturbances in the streams, larger volumes of water stored behind the embankments, and higher construction/removal costs (approximately \$ 15,000 dollars per pond).

Avoiding this project is also not a viable option since the advantages of economic development in the surrounding small communities such as Sidney, KY, in Pike county would not be realized. Local jobs would be lost, the tax base would diminish, and local businesses would not prosper to the same extent.

Hence, alternatives to lowering water quality were climinated.

#### III. Socio-economic Demonstration

1. State the positive and beneficial effects of this facility on the existing environment or a public health problem.

This area has been previously mined and logged with the discharge from those areas presently flowing untreated into area streams. Sidney Coal Company, Inc. proposes to build ten dugout ponds and one embankment pond to treat this watershed discharge. The area will also be re-graded to prevent erosion from the previous logging activities.

2. Describe this facility's effect on the employment of the area.

This mining operation would provide employment for an estimated (50) employees. These mining positions will prove to be higher paying jobs than other industries in Pike county, specifically near small communities such as Sidney, KY. The average weekly wage in the mining industry for Pike county is \$887.25. This is compared to the average weekly wage for all other industries in Pike County of \$502.50 (2003 U. S. Bureau of Labor Statistics).

3. Describe how this facility will increase or avoid the decrease of area employment.

The economy, in this portion of Pike County, is dependent on the Mining Industry. Therefore, this operation will provide for the continuation of higher wage permanent employment in the area work force. This also positively affects the support industries that will help to supply the material and equipment needed for mining, as well as other services such as engineering, and also the training that will be needed for employees to work in the mines.

It is likely that a new mine will lead to an increase in employment, but at the very least, the mine will avoid a decrease in local employment figures.

4. Describe the industrial or commercial benefits to the community, including the creation of jobs, the raising of additional revenues, the creation of new or additional tax bases.

The surface mine facility will provide new jobs in Pike County, in small communities such as Sidney, KY, and help prevent the loss of jobs when an existing area facility closes or moves to another area. Recovery of the coal, located along Bevins Branch, will produce over 738,200 tons of coal. This will generate over \$538,894 in severance taxes, at approximately \$0.73 cents/ton, of which Pike county will receive a total of over \$80,834 (15 percent). Additional revenue will be given to local businesses generated through increased employment to handle support services catering to the mining operation directly and to the needs of the employees on a daily basis. Local income taxes, property taxes, and sales taxes, will also add to revenue brought in by the mining facility.

These monies will be returned to the community providing funds to help establish alternative industries for additional local employment opportunities, as well as provide for public safety, environmental protection, public transportation, vocational training, local health / recreational / educational facilities, social services, industrial/economic development, workforce training, and the secondary wood industry. Property values increase when land is active. Therefore, when mining is being conducted, the land has an increased value requiring increased property taxes to be paid in to the city operating fund.

5. Describe any other economic of social benefits to the community.		
This facility will not only provide mining jobs but will also provide jobs that help support the mining industry. Equipment sales and repair, mining and engineering consultants, along with fuel and transportation providers, will be needed as a result of the mine. The creation of more jobs in the surrounding communities such as Sidney, KY in Pike county, will spur community development, thus creating even more employment opportunites in the local area.  The increased payments of property taxes will benefit schools so that they have funding to purchase better equipment, improve their facilities, and increased salaries for the teachers. In addition, the increased tax payments will provide additional money for government services to better serve the local area citizens.		
III. Socio-economic Demonstration – continued		
		No
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The state of the s		
8. Will this project increase or decrease revenues in the county?		
9. Will any public buildings be affected by this system?		
10. How many households will be <i>economically</i> or <i>socially</i> impacted by this project?		
It is estimated that (50) workers will be employed by the project. Thus, (50) households will be directly affected by the operation. These households will, in turn, affect at least 1.5 times additional households (75), of local business owners and their employees by purchasing goods and services in the area.		
11. How will those households (if any) be <i>economically</i> or <i>socially</i> impacted?  (For example, through creation of jobs, educational opportunities, or other social or economic benefits)	· · · · · ·	
The households of the estimated (50) facility employees will be positively impacted by the higher than average income that these mining jobs will provide. The average weekly wage for the mining industry in Pike county is \$887.25. The average weekly wage for all other industries in Pike county is \$502.50.		
Additionally, many other households will be impacted by the increased business for local retailers and their employees in Pike county, engineering services, and fuel/transportation providers, particularly around small communities such as Sidney, KY. The employees of these support businesses will be positively impacted with a more secure place of employment due to the increased revenue given by the mining industry.	ertu saharibarrah 14	

·			Yes No						
12. Does this project replace any other methods of sewage treatment to existing	facilities? If so,	describe how.							
The proposed project is a surface mining operation. There are no exist discharges that this project could replace.	ing sewage wast	e water							
	······································	-	Yes No						
13. Does this project treat any existing sources of pollution more effectively? I	f so, describe ho	w. (							
The discharge proposed in this application is in areas that have not been mined before. Presently, the surface discharge is uncontrolled runoff. Any discharge from these drainage areas into area streams will now be treated for sediment control.									
III. Socio-Economic Demonstration - continued									
14. Does this project eliminate any other sources of discharge or pollutants?	If so, describe ho	ow. /	Yes No						
The Bevins Branch watershed area has been previously mined and logged. With the mining proposed for this project and the areas that have been logged, this watershed area will now be provided with sediment control structures instead of the current uncontrolled runoff into area streams.  15. How will the increase in production levels positively affect the socio-economic condition of the area?									
The increase in productivity levels is not only providing jobs for this operation at a higher than average weekly mining wage of \$887.25 in Pike county, versus all other industry wages of \$502.50 in Pike county, but will create additional revenue for the existing businesses in and around Pike county. The additional revenue of the local businesses and the severance tax dollars for Pike county generated by this project (over \$80,834 dollars), will provide the local government increased benefits in public safety (law enforcement, fire protection, ambulance services) and also aid in the industrial and economic development in the surrounding communities such as Sidney, KY in Pike county.									
16. How will the increase in operational efficiency positively affect the socio-e	conomic condition	on of the area?							
The facility (a surface mine), will provide employment to an estimated (50) workers during the life of the operation. Also, the project will help to provide additional jobs in other sectors of the economy such as engineering, fuel, and transportation. Thus, mining operations positively affect the local economy more so than other industries.  Better Product a = More John									
IV. Certification: I certify, under penalty of law, that this document and all attachments were prepared under my direction or									
supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine & imprisonment for knowing violations.									
Printed Name and Title: Randy L. Tackett, Agent	Telephone No. w/Area Code	606-353-5500							
Signature: Randy L. Tackett	Date:	3-12-07							
Sidney Coal Company, Inc. 898-0798 KPDES Form HQA	A Bevins Bra	nch March 20	007						

### APPOINTMENT OF AUTHORIZED AGENT

KNOW ALL MEN BY THESE PRESENTS, that Sidney Coal Company, Inc., a corporation duly organized and existing under the laws of the Commonwealth of Kentucky, has made, constituted and appointed, and by these presents doth hereby make, constitute and appoints Randy L. Tackett of Pike County, in the commonwealth of Kentucky, to be its true and lawful Authorized Agent, who may act for it and in its name, and as and for its corporate act and deed, to sign for and on behalf of Sidney Coal Company, Inc. all permit applications and other related documents pertaining to all coal mining operations and related activities pertaining to Sidney Coal Company, Inc. including those regulated by state and/or federal law in connection with Sidney Coal Company, Inc. lands and operations situated in the Commonwealth of Kentucky. This Authority shall become effective with the execution of this document.

Sidney Coal Company, Inc.

BY: Charles I. Bearse

Its, President

STATE OF Kentucky

COUNTY OF PIKE, to wit:

Given under my hand this /5+ day of / 2005

My commission expires

OTARY PUBLIC

THIS IS A TRUE AND EXACT COPY

OF THE ORIGINAL DOCUMENT.

MY COMMISSION EXPIRES 4/25/2010